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COTTON PRODUCTION GOALS
Report for 1943

563879

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Available information now indicates that supplies of cotton for the 1942-43 season are adequate to meet requirements for the current season and will probably leave a substantial carry-over of all staple lengths and grades for use in the 1943-44 season. This tentative conclusion, however, is based upon estimates of production and distribution of various qualities of cotton which cannot be accurately determined until later in the season. Indicated production for the 1942 season is 13,668,000 running bales (14,028,000 bales of 500 pounds) and the carry-over at the beginning of the season totaled 10,590,000 bales, giving a total supply of approximately 24,408,000 bales, including prospective imports for the season. Of this supply about 13,232,000 bales will probably be consumed and exported during the season, leaving a carry-over as of August 1, 1943, of 11,176,000 bales or 84 percent of the estimated disappearance for the season. Although this prospective carry-over is considerably smaller than the 12,170,000-bale carry-over for August 1, 1941, and the record high of 13,033,000 bales carried over in 1939, it is larger than a year earlier and substantially larger than the average carry-over of 9,008,000 bales for the five years ended with 1940 and the 10-year (1931-40) average of 8,420,000 bales.

Upland cotton supplies for the 1942-43 season in each of the three staple length groups (31-32 inch and shorter, 1 inch through 1-3/32 inches, and 1-1/8 inches and longer) appear to be adequate on the basis of early-season estimates. Efforts to encourage farmers to maintain or increase the production of the longer staple lengths of cotton, however, should be maintained and might well be increased with respect to shifts from the production of cotton shorter than 1 inch to the lengths of 1 inch through 1-3/32 inches. There is a considerable surplus of the shorter staple cottons, especially the lower grades. This surplus should be reduced and it is essential that adequate supplies of the longer staples be provided. Although there appears to be no immediate danger of a shortage of long staple (1-1/8 inches and longer) cotton, supplies of this quality must be well maintained to fill military and essential civilian needs. Efforts to increase the production of the higher grades of cotton also should be continued.

American-Egyptian cotton supplies, mainly SxP 1-1/2 inches and longer, certainly appear to be adequate to meet indicated needs for the 1942-43 season, but efforts to maintain the production of this growth should not be relaxed. In fact, the accumulation of a reasonable stock pile of this extra-long staple cotton to meet requirements in the event imports of Egyptian cotton should be drastically curtailed would seem to be justified.

Imported Egyptian cotton supplies appear adequate to meet requirements for this growth in 1942-43. Although supplies of other foreign growths, principally short staple Indian cotton for use in part-woolen fabrics, may be large enough to supply all users of this cotton in 1942-43, the carry-over will be comparatively small at the end of the season. It is believed, however, that this situation is not sufficiently urgent to necessitate any special efforts to increase imports.

Production of 13,668,000 running bales indicated for 1942 compares with 10,495,000 bales produced in 1941 and a "feasible" production of about

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11,600,000 bales for 1943. Production of upland cotton 31/32 inch and shorter is expected to total about 4,772,000 bales in 1942 against 7,666,000 bales of 1 inch through 1-3/32 inches and 1,130,000 bales 1-1/8 inches and longer. This compares with 3,931,000, 5,789,000, and 714,000 bales, respectively, in the previous season. American-Egyptian cotton production may approximate 100,000 bales in 1942 against 58,000 in the previous season. Indicated sea island production for 1942 is down to only about 1,000 bales against 3,000 a year earlier.

Imports for consumption of Egyptian cotton during the 1942-43 season are expected to total about 90,000 bales (approximately the amount permitted under the present quota) and about the same as indicated 1942 consumption. This, however, represents only cotton taken "out of bond". Except for Egyptian cotton now afloat, shipments of this cotton are expected to be relatively small during the 1942-43 season but the quantity "in bond" and afloat at the beginning of the season totaled about 170,000 bales. Assuming this cotton to be available plus the carry-over of 39,000 bales in mills and public warehouses gives a total actual supply of some 210,000 bales or about 2-1/3 years' supply at the current rate of consumption.

Requirements for 1943

Total requirements for cotton in 1943 now seem likely to fall within a range of from 13,000,000 to 13,500,000 bales. This is about the same as the estimated requirements of 13,232,000 bales for 1942 and about 1,000,000 bales more than the total disappearance of 12,357,000 bales in 1941. Disappearance of upland cotton 31/32 inch and shorter is expected to be about 5,000,000 bales in 1942 and 1943, or a little more than in 1941, but substantially less than the 5-year average. The sharp decline in disappearance of short staple cotton as compared with the 5-year average is accounted for by the drastic reduction in exports. Consumption and exports of cotton 1 inch through 1-3/32 inches may total 7,000,000 bales in 1943 or about the same as in 1942, but about 500,000 bales more than in 1941. Disappearance of upland cotton 1-1/8 inches and longer is expected to be at, or near, the 1,000,000-bale level during the 1942 and 1943 seasons, or approximately 200,000 bales larger than in 1941. Most of this indicated increase is accounted for by prospects for larger exports under lend-lease.

American-Egyptian cotton requirements are placed at 60,000 bales in 1943-44, or about the same as estimated consumption in 1942-43. Disappearance of American-Egyptian cotton in 1941 totaled slightly under 50,000 bales and at the current monthly rate of consumption would total only about 50,000 bales in 1942-43, but increases in the use of this cotton in the manufacture of thread, industrial fabrics, airplane and balloon cloths, and various other materials is expected to result in some increase in the rate of consumption during the 1942 season.

The disappearance of domestic sea island cotton indicated for 1943 is 1,000 bales or substantially less than the 5,000 estimated for 1942 and 3,000 in 1941. More of this cotton doubtless would be consumed if it could be produced at reasonable costs.



Requirements for imported Egyptian cotton are likely to be about 90,000 bales in both this season and next, or slightly more than the 87,000 bales consumed in 1941. Approximately 90,000 bales of Egyptian cotton may be imported under present quotas and it is now expected that the War Production Board will permit that quantity to be consumed. With future importation of extra-long staple cotton in doubt, it would seem advisable for additional restrictions to be placed on the consumption of imported Egyptian cotton. This might take the form of requiring the substitution of American-Egyptian (SxP) cotton for imported Egyptian in those uses where so doing would result in a minimum of disruption of the war effort.

Feasible Production

Feasible production of cotton for 1943 is placed at approximately 12,000,000 bales of 500 pounds gross (11,600,000 running bales) against estimated production of 14,028,000 for 1942 and 10,744,000 for 1941. The 5-year (1936-40) average production was 13,534,000 bales. Feasible production for 1943 assumes some increase in acreage over 1942, most of which would probably occur in areas which have been underplanting their cotton allotments by a substantial acreage in recent years.

American-Egyptian cotton has an indicated feasible production of about 103,000 bales of 500 pounds on an acreage of 200,000, assuming sufficient labor to harvest the crop in Arizona. This is about the same as the estimated production for 1942. The feasible production of sea island cotton in 1943 is approximately the same as the 1,000 bales indicated for 1942. Heavy losses from boll weevil and other insects and diseases have resulted in very low yields per acre of sea island cotton in recent years. This, together with increased profitability of other crops, accounts for the sharp decrease in the production of sea island cotton. Puerto Rican sea island cotton is expected to help meet the needs for extra-long staple cotton, especially staples of about 2 inches which is longer than any cotton in the domestic crop.

With feasible production it is estimated that supplies of cotton available in 1943-44 would probably be adequate to meet requirements for upland cotton in each important staple length group and for American-Egyptian. Unfavorable weather for harvesting the 1942 crop, coupled with delays resulting from a shortage of pickers, however, could result in a scarcity of some of the higher grades and this also applies to the 1943 crop. With respect to the 1943 crop there is, of course, considerable uncertainty as to yields and a crop failure in all or portions of the belt could result in a scarcity of some important qualities if an acreage only slightly larger than that for 1942 were planted in 1943.

Moreover, it should be emphasized that estimates of requirements for the current and succeeding seasons are subject to revision. Unforeseen developments in both domestic requirements and lend-lease needs might alter the picture considerably in either direction. In this connection, however, it should be noted that domestic mills are operating at record high levels, and further increases in activity are expected to be rather limited. The same restrictions are not present, however, with respect to shifts in requirements for different qualities of cotton. On the other hand, the possibilities of substitution of one quality for another in the event of scarcities of certain qualities offer a means of relieving tight situations which could develop.



Goals for 1943

The possibility of a shortage of some essential qualities of cotton, arising out of unfavorable growing or harvesting conditions, or shifts in requirements coupled with the urgent need for increased supplies of cottonseed oil and linters, makes it seem desirable to set a goal for the 1943 season of from 25,000,000 to 27,000,000 acres. An acreage of this size would give a crop ranging from 11,900,000 to 12,850,000 running bales at average yields of 240 pounds per acre. The following figures give the production goals for all kinds of cotton in the United States for 1943, with acreage and production figures for previous seasons.

	Acreage		Yield	Production	
	Planted	Harvested	per A.	500-lb. bales	running bales
	1,000 acres	1,000 acres	Pounds	1,000	1,000
1936-40 av.	27,858	27,058	239.1	13,534	13,159
1941	23,132	22,238	231.9	10,744	10,495
1942	24,005	23,273	289.3	14,028	13,668
1943(goals)	25,000-27,000	24,250-26,150	240	12,175-13,150	11,900-12,850

The substantial increase indicated for total production of cotton in 1942 and the expected increase in the production of the longer staples relative to the shorter staples, especially 1-1/8 inches and longer cotton, appears likely to result in a total supply of the various qualities sufficient to meet requirements for the current season. It is important, however, that the production of the longer staple upland cotton be further expanded next season, and that farmers shift generally to longer staple varieties than those previously grown where adapted varieties are available. To encourage such shifts prices should be maintained or increased for the longer staples and higher grades relative to the lower qualities. This would provide both medium and long staple cotton and reduce supplies of the lengths under 1 inch, of which there is already a relative over-supply.

There should be a concerted effort to increase the production of the higher grades. Farmers in areas where a relatively high proportion of cotton produced would likely be shorter than 1 inch or low in grade might be encouraged to shift, in part at least, to other war crops for which the need exceeds that for short staple or low grade cotton.

Programs should be established to stimulate increased production in areas where staple lengths of longer than 1 inch can be grown and where there is a minimum of competition with other vital war crops. Specifically:

1. It is contemplated that farmers will be required to plant a minimum of 90 percent of their cotton allotment unless additional acreage of war crops is grown.
2. Consideration should be given to methods of increasing cotton acreage in specified areas where the competition from other war crops for land and labor is not acute, and where medium or longer lengths of cotton can be grown within the allotted acreages.



American-Egyptian Goals

The goal for American-Egyptian cotton for 1943 is placed at 200,000 acres or about the same as the record high acreage planted in 1942. In view of the stiff competition from other crops, labor shortages, and other production difficulties, along with adequate supplies of this growth for 1943, it is believed that an acreage goal about the same as that planted in 1942 would be sufficient. The following figures show goals for American-Egyptian cotton in 1943 with acreage and production figures for previous years.

	Acreage		Yield: per A::	Production	
	Planted	Harvested		1,000 500 lb. bales	1,000 running bales
	1,000 acres	1,000 acres	Pounds		
1936-40	-	42	258	22	22
1941	137	135	212	60	58
1942	197	194	251	101	99
1943(goals)	200	197	250	103	100

In order to reach this goal it will be necessary to assure growers of a per acre return on SxP cotton equal to that obtainable from Upland cotton. Moreover, the labor situation with respect to harvesting American-Egyptian cotton is expected to be critical in 1943 and to get this production definite steps will probably need to be taken to assure growers of an adequate supply of pickers.

Sea Island Goals

The 1943 goal for Continental United States sea island cotton is placed at 9,500 planted acres, which at last season's yields per acre would give about 1,000 running bales, or approximately the same as for 1942. A larger acreage goal of sea island is not recommended because of production difficulties and the apparent adequacy of supplies of cotton in these lengths. Production of Puerto Rican sea island cotton, which ranges up to 2 inches in staple length, should be increased as much as possible in order to fill needs for this cotton, which is longer in staple than Egyptian. The following figures show goals for sea island in Continental United States for 1943 and acreage and production figures for previous seasons.

	Acreage		Yield: per A::	Production	
	Planted	Harvested		1,000 500-lb. bales	1,000 running bales
	1,000 acres	1,000 acres	Pounds		
1936-40	-	19.0	70	2.6	3
1941	38.9	33.2	41	2.8	3
1942	9.5	7.5	79	1.2	1
1943(goals)	9.5	7.5	80	1.2	1

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Work Sheet

Goals for 1943

COTTON: Acreage, production, supplies, and disappearance, United States, Average 1936-40

Item	Acreage		Yield	Production		Carry- over,	Disappearance				Carry- over,	Percent
	Planted	Harvested		per acre	500-lb. bales		1/ Running bales	begin- ning of season	Supply	Exports		
			Domestic			Other				2/ Total	Percent	
	1,000	1,000		1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
	acres	acres	Pounds	bales	bales	bales	bales	bales	bales	bales	bales	
Upland:												
31/32" & shorter	-	-	-	-	7,078	5,809	12,887	-	-	-	6,537	97
1" thru 1-3/32"	-	-	-	-	5,255	2,581	7,836	-	-	-	4,550	72
1-1/8" & longer	-	-	-	-	801	519	1,320	-	-	-	711	86
Total	-	-	-	-	13,134	8,909	22,043	7,470	-	4,328	11,798	87
American-Egyptian	42	42	258	22	22	8	30	19	-	-	19	58
Sea Island	21	19	70	2.6	3	2	5	4	-	-	4	25
Total American	27,858	27,058	239.1	13,534	13,159	8,919	22,078	7,493	-	4,328	11,821	87
Foreign:												
Egyptian	-	-	-	-	59	36	95	58	-	-	58	64
Other	-	-	-	-	126	53	179	114	-	-	114	57
Total	-	-	-	-	185	89	274	172	-	-	172	59
All Growths	-	-	-	-	13,344	9,008	22,352	7,665	-	4,328	11,993	86
Extra Staple 3/	-	-	-	-	84	46	130	81	-	-	81	60

1/ Foreign in bales of 478 pounds net.

2/ Supply minus carry-over at end of season.

3/ American-Egyptian, Sea Island produced in the United States and imported Egyptian.

COTTON: Acreage, production, supplies, and disappearance, United States, 1941-42

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Work Sheet
Goals for 1943

Growth and Quality	Acreage		Yield per Acre	Production or Imports		Carry- over, begin- ing of season	Supply		Disappearance		Carry- over, end of season	Percent Carry-over is of Disappear- ance		
	Planted	Harvested		500-lb. bales	Running 1/2 bales		Domestic	Lend- lease	Exports Other	Total			Total	
Upland:	1,000	1,000		1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	Percent		
	acres	acres	Pounds	bales	bales	bales	bales	bales	bales	bales	bales			
31/32" & Shorter	-	-	-	-	3,931	6,814	10,745	4,133	-	-	650	4,783	5,962	125
1" thru' 1-3/32"	-	-	-	-	5,789	4,467	10,256	5,977	-	-	459	6,436	3,820	59
1-1/8" & longer	-	-	-	-	714	730	1,444	786	-	-	15	801	643	80
Total	-	-	-	-	10,434	12,011	22,445	10,896	-	-	1,124	12,020	10,425	87
Am. Egyptian	137	135	212	60	58	16	74	48	-	-	1	49	25	51
Sea Island	38.9	33.2	41	2.8	3	5	8	3	-	-	-	3	5	168
Total American	23,132	22,238	231.9	10,744	10,495	12,032	22,527	10,947	-	-	1,125	12,072	10,455	87
Foreign: 3/														
Egyptian	-	-	-	-	81	45	126	87	-	-	-	87	39	45
Other	-	-	-	-	200	94	294	198	-	-	-	198	96	49
Total	-	-	-	-	281	139	420	285	-	-	-	285	135	47
All Growths	-	-	-	-	10,776	12,171	22,947	11,232	-	-	1,125	12,357	10,590	86
Extra Staple 4/	-	-	-	-	142	66	208	138	-	-	1	139	69	50

1/ Foreign in bales of 478 pounds net.2/ Supply minus carry-over at end of season.3/ Imports are "imports for consumption" and do not include an estimated 170,000 bales of Egyptian cotton "held in bond" or afloat to the United States as of August 1, 1942.4/ American-Egyptian, Sea Island, produced in the United States and imported Egyptian.

Cotton: Acreage, production, supplies, and disappearance, United States, 1942-43

Growth and quality	Acreage ^{1/}		Yield per acre ^{1/}	Production ^{1/} or imports	Carry- over begin- ning of season	Supply ^{1/}	Disappearance ^{2/}				Carry- over, end of season	Percent : carry-over : is of : disap- : pearance					
	Planted	Harvested					500-lb. bales	Running bales ^{3/}	Exports				Domestic : lease ^{1/}	Total			
									1000	bales				1000	bales	1000	bales
Upland:	1000	1000	pounds	1000	1000	1000	1000	1000	1000	1000	1000	percent					
31/32" & shorter	-	-	-	-	4,772	5,962	10,734	4,370	388	250	638	5,008	5,726	114			
1" thru 1-3/32"	-	-	-	-	7,666	3,820	11,486	6,150	637	200	837	6,987	4,499	64			
1-1/8" & longer	-	-	-	-	1,130	643	1,773	820	152	-	152	972	801	82			
Total	-	-	-	-	13,568	10,425	23,993	11,340	1,177	450	1,627	12,967	11,026	85			
American-Egyptian	197	194	251	101	99	25	124	60	-	-	-	60	64	107			
Sea-island	9.5	7.5	79	1.2	1	5	6	5	-	-	-	5	1	20			
Total American	24,005	23,273	289	14,028	13,668	10,455	24,123	11,405	1,177	450	1,627	13,032	11,091	85			
Foreign:	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Egyptian	-	-	-	-	90	39	129	90	-	-	-	90	39	43			
Other	-	-	-	-	60	96	156	110	-	-	-	110	46	42			
Total	-	-	-	-	150	135	285	200	-	-	-	200	85	43			
All Growths	-	-	-	-	13,818	10,590	24,408	11,605	1,177	450	1,627	13,232	11,176	84			
Extra Staple ^{4/}	-	-	-	-	190	69	259	155	-	-	-	155	104	67			

^{1/} Estimated.^{2/} Supply minus carry-over at end of season.^{3/} Foreign in bales of 478 pounds net.^{4/} American-Egyptian, Sea-island produced in the United States and imported Egyptian.

Cotton: Acreage, production, supplies, and disappearance, United States, 1943-44.

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Work Sheet
Goals for 1943

Growth and Quality	Acreage <u>1/</u>	Yield per Acre <u>1/</u>	Production or imports <u>1/</u>	Carry-over, <u>1/</u>	Supply <u>1/</u>	Domestic <u>1/</u>	Disappearance <u>1/ 2/</u>				Carry-over, <u>1/</u>	Percent of Carry-over <u>1/</u>
							Exports	Losses	Other	Total		
Planted	Harvested	Acre	500-lb. bales	beginning of season	ending of season	1000 bales	1000 bales	1000 bales	1000 bales	1000 bales	1000 bales	percent
1000 acres	1000 acres	Pounds	1000 bales	1000 bales	1000 bales	1000 bales	1000 bales	1000 bales	1000 bales	1000 bales	1000 bales	percent
Up-land:												
31/32" & shorter	-	-	4,249	5,726	9,975	4,400	400	250	650	5,050	4,925	99
1" thru 1-5/32"	-	-	6,900	4,498	11,399	6,168	650	200	850	7,018	4,381	62
1-1/8" & longer	-	-	1,100	801	1,901	850	150	-	150	1,000	901	90
Total	-	-	12,249	11,026	23,275	11,418	1,200	450	1,650	13,068	10,207	78
Am-Egyptian	200	197	103	64	164	60	-	-	-	60	104	173
Sea-island	9.5	80	1.2	1	2	1	-	-	-	1	1	100
Total American	26,000	25,200	12,650	12,350	23,441	11,479	1,200	450	1,650	13,129	10,312	78
Foreign:												
Egyptian	-	-	85	39	124	90	-	-	-	90	34	38
Other	-	-	-	46	46	31	-	-	-	31	15	48
Total	-	-	85	85	170	121	-	-	-	121	49	40
All Growths	-	-	12,435	11,176	23,611	11,600	1,200	450	1,650	13,250	10,361	78
Extra Staple <u>4/</u>	-	-	186	104	290	151	-	-	-	151	139	92

- 1/ Estimated
- 2/ Supply minus carry-over at end of season
- 3/ Foreign in bales of 478 pounds net
- 4/ American-Egyptian, Sea-island produced in the United States, and Imported Egyptian.

DAIRY PRODUCTS

The freezing of price levels for dairy products has brought to a sharp climax the outlook for the coming year with respect to war requirements for dairy products on the one hand, and the outlook for production of dairy products on the other. The outlook is such as to warrant immediate serious consideration of measures that can be taken to obtain maximum production for the coming year, and more important perhaps, to help prevent reduction in dairy cow numbers which will seriously affect production 2 and 3 years ahead.

Requirements for Dairy Products

Total requirements for dairy products for the calendar year 1943 are estimated at about $133\frac{1}{2}$ billion pounds of milk equivalent. This total includes 108 billion pounds for civilian use, about $9\frac{1}{2}$ billion for lend-lease, nearly 9 billion for military, 1 billion for relief, close to 1 billion for commercial exports and shipments, and a total carryover of 5 billion pounds at the end of the year. This carryover is a bare minimum for essential working stocks under present conditions. It assumes the maintenance of AMA stocks at a level equivalent to 3 months' requirements and civilian stocks at 1935-39 average levels.

The civilian consumption estimates were obtained from the Civilian Supply Section of WPR and are about equivalent to the amounts consumers would take based on prospective prices or price ceilings and consumers' incomes, assuming no rationing. Army, Navy, and lend-lease requirements are largely for manufactured dairy products - cheese, powdered milk, butter, evaporated milk - and are based on current commitments. These commitments have been influenced in part by estimates of available supplies, and will undoubtedly increase if supplies and shipping space become more readily available.

Production in Relation to Requirements

Prospective total milk production for the calendar year 1943 is estimated at 120 billion pounds. This estimate is based largely on the rate of production during the part of 1942 already passed and assumes that conditions affecting milk production, such as feed prices, and farm labor conditions will become somewhat less favorable to dairy production during 1943. The estimate assumes from 1 to 3 percent more cows on farms than during 1942. Total stocks of dairy products on January 1, 1943 are estimated at $4\frac{1}{2}$ billion pounds of milk equivalent. Adding together the prospective total milk production and the estimated stocks results in a total supply of $124\frac{1}{2}$ billion pounds with which to meet total requirements estimated at $133\frac{1}{2}$ billion pounds. This leaves a deficit of 9 billion pounds. Unless immediate action is taken to stimulate milk production, this huge deficit must be met either by reducing civilian consumption or by failing to supply the quantities required for war purposes.

If adequate provision is made for prices or subsidies which will bring about diversion of milk from one product to another, the significant shortage might be confined to the civilian consumption of one or two major products. For example, if the entire 9 billion pounds were diverted from butter to other products, civilian consumption of butter would be reduced 450 million pounds or about 20 percent below what would otherwise be consumed with prospective prices.

Production Goal for 1943

In view of the total requirements situation a production goal for 1943 of at least 125 billion pounds of milk is recommended. This production would still be 4 billion pounds short of meeting total requirements but with the critical labor situation this would seem to be the maximum production that could be attained in 1943. But in order to attain even this goal strong incentives for increased production must be provided by a definite production program. Furthermore, the general outline of such a program should be announced in the immediate future.

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Supply and distribution of milk and dairy products, calendar year,
1936-40 average, 1941-43

Year	Stocks first of year	Estimated production	Probable imports	Total supply	Military lease, exports and shipments	Civilian relief consumption	Per capita consumption	Stocks	Government surplus	Deficit
Million Pounds										
Total milk for human consumption										
36-40:	3,009	105,253	653	108,915	444	831	104,512	810.6	2,672	462
1941 :	2,729	115,196	279	118,204	5,165	331	107,222	817.1	4,907	593
1942 :	5,485	119,426	415	125,326	11,008	792	108,892	838.3	2,168	2,466
1943 :	4,645	120,000	50	124,695	19,514	1,075	108,118	852.6	2,594	2,322 -8928
Butter, farm and factory										
36-40:	66	2,184	5	2,255	8	35	2,145	16.6	44	22
1941 :	41	2,265	4	2,310	73	7	2,115	16.1	109	6
1942 :	114	2,249	15	2,378	171	11	2,161	16.6	25	10
1943 :	35	2,270	0	2,305	373	11	2,156	17.0	44	30 -309
All cheese, except cottage, pot, and bakers										
36-40:	109	702	53	864	5	2	743	5.8	115	0
1941 :	130	954	20	1,104	106	0	796	6.1	159	43
1942 :	202	1,165	10	1,377	396	5	815	6.3	100	61
1943 :	161	1,140	5	1,306	617	10	824	6.5	109	130 -384
Condensed and evaporated milk										
36-40:	188	2,364	1	2,553	80	23	2,239	17.4	211	0
1941 :	196	3,571	-	3,767	916	1	2,492	19.0	340	17
1942 :	357	3,923	-	4,280	1,071	80	2,249	17.3	150	730
1943 :	880	3,000	0	3,880	1,537	163	2,460	19.4	188	160 -628
Ice cream										
36-40:	-	1,343	-	1,343	-	-	1,343	10.4	-	-
1941 :	-	1,786	-	1,786	38	-	1,748	13.3	-	-
1942 :	-	1,927	-	1,927	70	-	1,857	14.3	-	- 1/
1943 :	-	1,950	-	1,950	102	-	1,730	13.6	-	- +118
Dried whole milk										
36-40:	3	21	1	25	5	-	17	.13	4	-
1941 :	5	47	-	52	21	-	25	.19	6	-
1942 :	6	80	-	86	55	-	25	.19	1	5
1943 :	6	125	0	131	123	-	0	0	3	5 0
Malted milk										
36-40:	-	19	-	19	4	-	15	.116	-	-
1941 :	-	23	-	23	5	-	18	.137	-	-
1942 :	-	25	-	25	5	-	20	.154	-	-
1943 :	-	26	0	26	6	-	18	.142	-	- +2
Fluid milk and cream										
36-40:	101	44,670	3	44,774	1	25	44,646	346.2	102	-
1941 :	95	46,937	0	47,032	257	182	46,364	353.3	228	-
1942 :	228	47,500	0	47,728	424	335	46,665	359.2	305	- 1/
1943 :	305	50,000	0	50,305	801	385	46,544	367.0	142	- +2,400
Dried skim milk										
36-40:	17	269	4	290	5	-	265	2.1	20	-
1941 :	26	366	-	392	41	-	323	2.5	19	9
1942 :	28	565	-	593	216	3	265	2.0	20	89
1943 :	109	725	0	834	360	13	317	2.5	17	60 +57
Dried skim milk, spray process										
1943 :	7	400	0	407	260	-	100	.8	7	40 0
Dried skim milk, roller process										
1943 :	102	325	0	427	110	13	217	1.7	10	20 +57

1/ Requirements estimated by civilian supply, W.P.B. Consumer demand is expected to absorb the surplus.

Effects on Total Food Production of Shifting Feed and Labor
Between Hogs and Milk Cows

Since increases in total milk production above the expected production for 1943 would be used largely as substitutes for shortages of meats and fats, and since hogs are also a major source of both of these items and since present price ratios encourage the production of hogs rather than milk, it is desirable to consider the effect on the total food production of shifting feed and labor between these two alternatives.

The following facts should be taken into consideration in this connection:

(1) A given quantity of grain fed to milk cows will on the average produce considerably more fat in the form of butterfat than the same quantity of feed fed to hogs will produce in the form of rendered lard. In addition, the protein in the milk thus produced will be at least 50 percent greater than that in the pork. However, the total quantity of fat included in the dressed hog carcass (including the fat in the meat) will be almost double the quantity of butterfat obtained from the milk. Moreover, a given quantity of grain will produce about 10 percent more calories of food if fed to hogs than if fed to milk cows. But, of course, the higher protein mineral and vitamin content of the milk probably more than offsets the higher caloric content of the pork and lard.

(2) Furthermore, much land will produce a larger quantity of feed units when used to grow roughage rather than corn or small grain. The roughage from this land when fed to milk cows will produce more food than will the grain from the same land when fed to hogs. For example, in representative areas on the edge of the Corn Belt an average acre yield of 1.4 tons of mixed hay fed to milk cows will produce at least 10 percent more calories of food than will a corresponding average acre yield of 1,200 pounds of grain (corn, barley and oats) used to produce hogs.

(3) Current dairy-hog price relationships encourage the use of available grain supplies for the production of hogs. They also encourage a shift to more corn and small grain for hogs and away from roughage crops for dairy cattle. For example, 1,200 pounds of grain from 1 acre of land in the representative areas mentioned above when fed to hogs brings a gross return of about \$42, whereas 1.4 tons of hay from the same land fed to milk cows brings only about \$35. Current prices are causing farmers located on the edge of the Corn Belt, as well as in some other areas, to make production shifts that will reduce the total quantity of food produced in 1943.

(4) Available labor on many farms where production shifts are being considered will produce more total food if milk production is increased or at least maintained. An hour's labor on the average produces about 50 percent more protein (although about 13 percent less calories) from milk than from hogs. Moreover, if additional milk production is obtained mainly from increased production per cow, as will be the case in 1943 if the milk production goal is attained, the comparison will be even more favorable for milk, since more milk per cow requires considerably less labor than more milk from more cows. The above comparisons include not only the direct labor on livestock but also the labor used in producing the feed crops required by each class of stock.

Average number of milk cows during year, production per cow,
and total milk production on farms, 1936-40 average, 1941,
1942, and 1943 expected and goal

Year	Cows on farms	Production per cow	Total milk production
	<u>Thousands</u>	<u>Pounds</u>	<u>Million pounds</u>
1936-40 average	23,448	4,491	105,285
1941	24,357	4,742	115,498
1942	25,184	4,765	120,000
1943 (expected)	25,720	4,666	120,000
1943 (goal)	25,720	4,860	125,000

A Feed Certificate - Cash Payment
Subsidy Program
for Maintaining and Increasing Milk Production in 1943

As individual dairymen attempt to increase milk production above 1942 levels, they will encounter increasing physical costs in several directions. For example, if production per cow is increased, more grain will be required per pound of milk produced. If numbers of cows are increased, barns and pastures will be overcrowded and labor will be overworked, so that efficiency will decline and costs will rise.

A subsidy program which recognizes this principle and provides an incentive for the additional production which will offset the increases in costs will make more effective and equitable use of available funds than one which makes payments to all producers without regard to whether or not they increase production.

On the other hand, payments to dairymen for the continued maintenance of a high level of production which has been attained in previous years is necessary, if the maximum total production is to be achieved.

The present proposal attempts to combine the advantages of payments for increases and payments for maintenance of production.

Outline of Program

1. Determination of Bases

Bases in 1943 to be established at 1941 or 1942 levels of sales, whichever is higher. These to be determined for the six months periods January-June and July-December, from actual sales records. Adjustments to be permitted for unusual circumstances.

2. Payments in two parts

a. Maintenance payment on all sales from 80 to 100 percent of base. Rate of payment 80 cents per cwt. of 4 percent milk, or 20 cents per pound of butterfat.

b. Additional payment on all sales above base up to 120 percent of base. Rate of payment \$2.00 per cwt. of 4 percent milk or 50 cents per pound of butterfat.

3. Type of payment

Payment to be made in feed certificates redeemable optionally in Government controlled surplus feeds (particularly feed wheat and high protein oil meals), in other feeds, or in cash. Feed certificates to be exchanged at face value for Government controlled surplus feeds, and at 5 percent discount for other feeds or for cash. Appropriate adjustments to be made for mixed feeds containing Government controlled surplus feeds.

4. Time and method of payment

Semi-annual payments to be made directly to farmers through AAA county offices.

5. CCC feed advances

Initial loans or advances of feed equivalent in value to the semi-annual maintenance payment to be made by CCC out of feed wheat, protein oil meal stocks, or other Government controlled feed on the basis of certification by AAA that the individual producer is participating in the program.

Example

How the payments would work out may best be illustrated by a representative example of a 10-cow herd selling 4,000 pounds of 4 percent milk per cow in 1942. Assuming that 1942 sales were about 4 percent above 1941 and that 1943 sales will be at various levels, the base determination and payments would be as indicated below. Maximum payment for this herd would be 224 dollars as further sales would be over 120 percent of the base. However, a producer who anticipates this situation could apply for a base adjustment and could then earn payments in line with the new base.

Pounds Sold

1941	38,500
1942	40,000
Base	40,000
80 percent of base	32,000

1943 sales	: Percent of base	: Maintenance payment : 80 cents per cwt.	: Additional payment : \$2.00 per cwt.	: Total payment
<u>Pounds</u>	<u>Percent</u>	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
32,000	: 80	0	0	0
34,000	: 85	16	0	16
36,000	: 90	32	0	32
38,000	: 95	48	0	48
40,000	: 100	64	0	64
42,000	: 105	64	40	104
44,000	: 110	64	80	144
46,000	: 115	64	120	184
48,000	: 120	64	160	224
50,000	: 125	64	160	224

Cost of Program

To attain the production goal of 125 billion pounds, of which 103 billion pounds would be sold, it is estimated that the total cost of this program would be 232 million dollars, of which 132 million dollars would be for maintenance payments and 100 million dollars would be for additional payments. This assumes participation on the part of 60 percent of the 2.6 million farmers who sell milk or butterfat and inclusion of about 90 percent of all sales. It further assumes that 25 percent of the participating producers will qualify only for maintenance payments. In addition to payment costs, administrative expenses the first year might run as high as 20 million dollars.

Comparison of Various Methods of Payment

The simplest method of payment would be to offer a single rate of payment for all production above some percent of base, as for example, \$1.00 per cwt. for all above 80 percent. The principal objections to this procedure are that too much (about three-fourths) of the available money will be used for maintenance and too little incentive will be provided for increases in production. The latter point is reinforced by the fact that additional feed costs per cwt. increase progressively as production is pushed beyond normal levels.

To provide an additional incentive for production above base two rates of payment may be used. For example, as suggested earlier and as shown again on page 7, 80 cents per cwt. may be paid for production between 80 and 100 percent of base and \$2.00 for production between 100 and 120 percent of base. Under this plan about half of the payments would be for increases above base, and the total cost would be only slightly higher than for the single \$1.00 payment plan. This plan is recommended.

A less expensive program, having these same advantages, but providing no incentive for increases between 80 and 90 percent of base, would be to pay \$1.00 on production between 90 and 100 percent of base and \$2.00 from 100 to 120 percent.

Payments under these three plans are shown in detail on page 7 for the 10-cow example previously used.

Procedure for Initiating Program1. Announcement of Program

General nature of proposed subsidy program and definite registration date to be announced as soon as possible. Announcement to state that subsidy payment will depend on both total quantity sold in base period and on increases above base.

2. Registration

Registration of dairy producers to be held in local communities under supervision of AAA county committees. Registration form to cover such items as:

- Name, address, and location of producer.
- Name, address, and location of all cream and milk receiving plants and stations to which milk or cream was delivered in 1941 and 1942, including dates between which deliveries were made to each plant.

- c. Average number of milk cows and other pertinent farm information.

3. Collection of 1941 and 1942 Data for Bases

Names from the registration to be listed by plants or receiving stations and arrangements made for taking off quantities of milk or butterfat received from listed patrons by pay periods. Probably not more than the equivalent of one week's time for one person at a typical plant would be required.

Manpower problem to be partially met by using students and staff members of State colleges where possible, and available clerical and supervisory personnel of AAA committees.

4. New Bases and Adjustments

New and adjusted bases to be established by AAA county committees for new producers, old producers without adequate sales records, or old producers who are making marked increases or decreases in size of herd. Such bases to be in line with normal productive capacity of the individual farm and comparable with bases established under regular procedure.

Comparison of Various Methods of Payment

[illegible]

Production Goals,
1943

DRY BEANS AND DRY PEAS

SUMMARY

Dry beans and dry peas are near the top of the list as valuable wartime foods, largely because of conveniences in their handling, storing, relatively high nutritive content, and low food cost. Information available as of September 19, 1942, indicates that approximately 31,500,000 bags (100#) of beans and peas will be needed in the 1943-44 marketing year for civilian, military, Lend-Lease, and other necessary uses. Dry beans comprise about four-fifths and dry peas about one-fifth of this total. These quantities would be available from stocks carried over, plus the production of an acreage approximating the 1942 planted acreage goals with yields equal to about the 1936-40 average.

THE DRY BEAN SITUATION IN 1942

Dry bean requirements during the 1942 marketing year for Lend-Lease, military, civilian, and other purposes will total about 19.3 million bags, leaving an estimated carry-over on September 1, 1943, of about 5.8 million bags including Government-held stocks. The record-large indicated 1942 crop of 20.1 million bags (cleaned basis) was obtained from a planted acreage of 2,376,000 acres (2,219,000 harvested)--the largest in recent years--and from the highest yields in history. The 1942 planted acreage was, however, only 3 percent above the 1941 planted acreage, and 9 percent below the 1942 goal. Relatively more favorable prices for other crops and reluctance of dry-land farmers to expand their bean acreages were largely responsible for the failure to meet the 1942 goal.

FEASIBLE ACREAGE IN 1943

The 1943 feasible planted acreage of dry beans is 2,456,000 acres, an increase of 3.4 percent over 1942. Most of the increase probably would come from Michigan and the dry-land areas of the West.

Further expansion in the dry-land sections of the Western States is not a desirable long-time use of land because of the danger of damage from wind and water erosion. In the irrigated areas of the West increased production of beans must come largely from reduced acreages of sugar beets, potatoes, small grains, and hay. In other areas, the increase probably would come from sugar beets, soybeans, and vegetables for canning.

The present supply of farm machinery will be adequate unless a greatly increased production is required. In this case more dusting or spraying equipment would be needed. Bean production requires very little special machinery other than that used for wheat or other small grains and hay.

No serious labor shortage is anticipated because the process of producing beans is highly mechanized in most areas. Some Western farmers likely will grow beans instead of sugar beets because of relatively lower labor requirements. Exchange of work among farm families and hiring of boys and older men should ease the labor situation substantially.

Disease, infestation, and erosion problems probably can be solved by better production practices. The use of two-year old seed for control of bean blight is suggested for New Mexico.

There has been some dissatisfaction with the farm price largely because of adverse weather conditions which reduced the quality of the 1941 crop in some areas. However, the maintenance of approximately the level of prices to be supported by the Department's 1942 dry bean program should be adequate to induce farmers to plant at least the 1943 "feasible" acreage of 2,456,000 acres.

ACREAGE REQUIRED FOR 1943

The production required to provide the necessary 1943-44 dry bean supplies of about 24,697,000 bags would be very close to the 1942 acreage goals (including the 1942 planted acreage in States not given goals), if approximately 5-year average yields are harvested in 1943. Since there is a considerable variation from year to year in the yields of beans actually harvested per acre planted, it would be possible to have a surplus or deficit above or below indicated requirements if feasible acreage were planted. The 2,612,000 planted acres

Dry Beans and Peas (cont'd)

required in 1943 would involve increases over 1942 in New York, Michigan, Idaho, Colorado, New Mexico, and California. This would increase production of white beans, pintos, pinks, red kidney, and small reds.

RESERVE CAPACITY IN 1943

Farming systems in the major bean-producing areas are flexible enough to permit a total bean acreage in 1943 of 700,000 to 900,000 acres larger than the feasible estimates. The largest increases probably could be obtained in California, Colorado, Idaho, New Mexico, Michigan, Montana, and New York.

The 1943 reserve capacity for beans is made up largely of land now in other crops. Some new land might be plowed in Colorado and New Mexico. In the West more beans probably would mean less hay, feed grains, sugar beets, and potatoes, and truck crops, the latter primarily in California. Montana would likely use dry land. Wind erosion in some of the Western areas might be accelerated by these increases. Further increases in Michigan and New York probably would effect reductions in sugar beets, hay pasturage, and some truck crops. Attainment of the potential increase might necessitate more drills, harvesting, and spraying equipment.

DRY PEAS

Three-fourths of the 1942 dry pea crop was produced in the wheat-growing Palouse area of Eastern Washington and Northern Idaho, and Oregon. This area also produces some Austrian Winter seed peas which are not covered in this report. Two-thirds of the dry pea crop is of Alaska and other smooth green kinds. Dry peas are produced largely for seed in Montana and Southern Idaho and smaller quantities of various kinds are produced in Colorado, Michigan, and Wisconsin. In addition to these peas which are planted with the intention of harvesting dry, a substantial quantity of cannery and fresh-market peas have been harvested dry in each of the last two years, principally in Oregon.

1942 SITUATION FOR DRY PEAS

Lend-Lease, military, civilian, and other necessary requirements for dry peas during the 1942-43 marketing year will total about 5.7 million bags of 100 pounds each. This would leave an estimated carry-over on August 1, 1943, of about 1.2 million bags. The record-large crop of about 6.5 million bags (cleaned basis) was obtained from the largest planted acreage in history, 530,000 acres (479,000 harvested), and from record-large yields. The 1942 planted acreage, however, was about 20 percent below the National goal of 665,000 acres, but about 50 percent larger than that of 1941. Nearly all of the increase over 1941 in acreage planted to peas to harvest dry is in Idaho and Washington, the two largest producing States. In this wheat-growing area, peas are a desirable substitute for summer fallow. Acreage in Colorado, Montana, and Michigan increased relatively less. Only in Wisconsin did dry pea acreage decrease in 1942 below 1941.

FEASIBLE ACREAGE IN 1943

Feasible acreage in 1943 is estimated to be about 651,000 acres--28 percent above July 1, 1942 indications and about 90 percent above 1941. Most of the feasible increase above 1942 likely would be in the Palouse area of Idaho and Washington. However, each of the other dry pea producing states, except Michigan, could feasibly also increase plantings in 1943.

Attainment of 1943 feasible acreages in most of the Western States would necessitate greater use of summer fallow and the use of some land that is normally planted to small grains. The increase in Colorado would come largely from acreages that are normally used for peas for feed or for fresh market.

Attainment of 1943 feasible acreage and production probably would result in some shortages of dusting equipment and other machinery, storage space, bags, processing facilities and labor. New growers would need more complete marketing and production information also. Limited supplies of rotenone might be offset to some extent by more efficient application and by using substitutes for other purposes wherever possible.

Dry Beans and Peas (cont'd)

Shortages of dusting equipment and other machinery probably can be overcome largely by continuing the "repair and care" program which was started in 1941. The success of such a program, of course, depends on an adequate supply of repair parts. The shortage of machinery can be further alleviated by custom work or by cooperative use of available machinery.

The storage problem involves both space and bags. Storage facilities are already critically short, because of the record supplies of wheat. A shortage of bags is especially important in view of the fact that peas must be sacked for efficient storage. Shipment out of producing areas, construction of additional storage facilities, and development of satisfactory paper bags and other containers probably offer the major solutions to the storage problems. Paper bags are already being used to some extent. Although there may be some shortage of labor, it is probable that exchanging work and hiring of older men and boys would take care of the situation.

The necessary 1943 production can be produced on the acreage used as a goal for 1942. This goal, however, was not met in 1942. As in the case of dry beans, yields per acre planted and also yields per acre harvested vary considerably from year to year. Also, with the great expansion of acreage in the last few years and with exceptionally good yields in 1941 and 1942, it is difficult to make a precise estimate of the acreage actually needed under average conditions to produce the required crop in the areas where peas will most likely be grown.

Attainment of the 665,000 acres needed in 1943 to provide necessary supplies of about 6.9 million bags could be further facilitated by furnishing information to growers as early as possible on (1) type and varieties of peas needed, (2) nature of price-support program, and (3) suggestions on producing the crop so that farmers can plan their work, prepare the soil and obtain good seed as early as possible.

If prices in 1943 are maintained at approximately the 1942 support levels, growers should be encouraged to plant approximately the 1943 required acreage. Increased production is desired principally in the Alaska, Bluebell, First and Best, and White Canada types of smooth peas.

The 1943 potential acreage for dry peas is over 1,000,000 acres. Most of the 400,000 acre reserve capacity is in Idaho, Washington, Montana and Colorado. The acreage in Montana probably could be doubled under a contract system at present prices. Much of the increase in Idaho and Washington would be on summer fallow (wheat) land; in Colorado some further expansion is possible on land now in peas for feed, hay land, and in many of the high, cool mountain valleys.

* * *

Yield and Production (Field Run Basis)
1936-40, 1941, 1942

		Harvested Acreage/1		Yield Per Harvested Acre:		Production
Year	:	:	:	:	:	:
Beginning: 1936-40	:	1941	:	1942	:	1942
:	:	:	:	:	:	:
:	:	:	:	:	:	:
:	:	:	:	:	:	:
1	:	2	:	3	:	4
	:	thousands of acres	:	:	:	11
	:	:	:	pounds	:	thousand 100-lb. bags
Dry Edible Beans	:	:	:	:	:	:
Sept. 1	:	1,691	:	2,085	:	2,219
:	:	:	:	:	:	:
:	:	:	:	:	:	:
Aug. 1	:	234	:	284	:	479
	:	:	:	lbs.	:	1,055.0
	:	:	:	:	:	1,334.0
	:	:	:	:	:	1,515.0
	:	:	:	:	:	2,468
	:	:	:	:	:	3,788
	:	:	:	:	:	7,255

1936-40	1,893,000	acres
1941	2,304,000	"
1942	2,376,000	"
		14 3/4

$$\begin{array}{r} 2612.00 \\ 2376.00 \\ \hline 236,000 + \end{array}$$

1936-40	773.6
1941	815.5
1942	910.4

Dry Pools -	1936-40	914.1
	1941	1367.0
	1942	1368.9

Table II

DRY BEANS AND DRY PEAS

CONFIDENTIAL
 PRODUCTION DATA
 GOALS FOR 1943

Supplies, Production, Disappearance (Cleaned basis) 1936-40, 1941

Commodity	Unit	1936-40													
		Year	Begin	Disap	Stocks	Production	Carry-over	Import	Export	Stocks	Production	Carry-over	Import	Export	Disap
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Thous.													
	100 lb														
Dry Edible Beans	Sept	1	2,219	13,735	189	946	12,662	2,535	2,700	17,354	100	500	2,14,734	4,920	
Dry Peas	Aug	1	100	2,181	10	172	2,019	100	5	3,410	17	100	2,972	360	

/1 - Seed peas and beans included in above figures.

/2 - Other than Lend-Lease.

/3 - Includes Lend-Lease and relief distribution.

Table III

CONFIDENTIAL

WORK SHEET

GOALS FOR 1943

DRY BEANS AND DRY PEAS

Supplies, Production, Disappearance (Cleaned Basis), and Stocks

1942 and 1943 Marketing Years

Year and Commodity	Unit	Year Beginning	Stocks	Production	Imports	Supplies	Exports	Consumption	Carry-Over
	1,000 bags								
Marketing Year									
1942-43									
Dry Edible Beans	100 lbs	Sept. 1	4,920	20,125	75	25,120	500	3,500	14,000
Dry Peas	100 lbs	Aug. 1	360	6,530	10	6,900	100	2,500	3,000
1943-44									
Dry Edible Beans	100 lbs	Sept. 1	5,820	10,802	75	24,697	500	4,500	14,000
Dry Peas	100 lbs	Aug. 1	1,200	5,653	10	6,863	100	2,500	3,000

1. Includes Agr. Mkt. Admin. stocks.

2. Includes seed.

3. Based on 1936-40 average yields of 774 pounds per planted acre; 2,612,000 acres to be planted, and 7 percent cleanout.

4. Based on 1936-40 average yields of 914 pounds per planted acre; 665,000 acres to be planted, and 7 percent cleanout.

Table IV
DRY BEANS AND DRY PEAS

Supplies and Utilization of Products, by Quarters
1942 and 1943

Commodity	Unit	1942				1943				Total		
		Jan.	Apr.	June	July	Oct.	Jan.	Apr.	June	July	Oct.	Use
	1	2	3	4	5	6	7	8	9	10	11	
Dry Edible Beans:												
Supply /1	Thous.	13,779	9,343	6,923	23,545/2	18,720	13,895	9,070	23,017/2			
Use	100-lb	4,436	2,420	3,503	4,825	4,825	4,825	4,825	5,250			19,725
Stocks	bags	9,343	6,923	23,545/2	18,720	13,895	9,070	23,017/2	17,797			
Dry Peas												
Supply /1	Thous.	2,806	1,701	807	6,739/3	5,314	3,889	2,464	6,692/3			
Use	100-lb	1,105	894	598	1,425	1,425	1,425	1,425	1,440			5,715
Stocks /1	bags	1,701	807	6,739/3	5,314	3,889	2,464	6,692/3	5,252			

/1. Includes commercial and Agr. Mkt. Admin. stocks.
/2. Includes new crop as of September 1.
/3. Includes new crop as of August 1.

COMMERCIAL TRUCK CROPS FOR MARKET

Consideration of desirable acreages of commercial truck crops for 1943 involves about 21 crops and 38 producing States. These crops, in the order of the number of acres grown in 1942, are tomatoes, watermelons, cabbage, snap beans, lettuce, onions, cantaloups, asparagus, green peas, spinach, carrots, sweet corn, cucumbers, celery, cauliflower, green peppers, lima beans, beets, artichokes, eggplant, and kale.

The commercial acreage of the above crops grown for fresh market consumption in 1942 totals 1,736,000 acres compared with 1,726,000 acres in 1941 and the 5-year (1936-40) average of 1,749,000 acres. Because of favorable growing conditions in 1942 the yield per acre was unusually high for most of these crops. Total production this season will be about 8 percent greater than in 1941 and 10 percent more than the 5-year average production. Prices received by growers have exceeded the 5-year average for all vegetables and with the exception of cabbage and early-season onions have been considerably higher than in 1941.

In normal times growers would respond to the high price levels of 1942 by planting larger acreages of most of these crops in 1943. But since transportation facilities, labor supplies, farm wages, shipping containers, production machinery, fertilizer, and spray materials will have an important bearing on plantings for 1943, it is important that early consideration be given to desirable acreages of these perishable food crops. Only in this way can appropriate measures be taken to offset some of the production obstacles that stand in the way of adequate production in 1943.

The committee has recognized that some of these factors may curtail acreage and production in 1943. Although it is not possible to forecast the effect of the various factors at the present time, it appears that some of these will be significant despite any attempts that may be made to modify them. Under the circumstances it seemed necessary to recommend shifts in acreage as between crops as one method of obtaining adequate acreages of the more needed vegetables. As a basis of the acreage recommendations, the following considerations and assumptions were taken into account:

1. The Nation's war effort requires a diet consisting of a full variety and quantity of fresh vegetables. If meat is rationed, as now seems probable, a full selection and ample supply of fresh vegetables is needed to bolster the Nation's morale and collective stomach.
2. As the situation now appears, vegetables grown for the fresh market may have about the usual amount of competition from canned vegetables. A record pack of canned vegetables is indicated for the coming season. Military and Lease-Lend requirements are expected to be between one-quarter and one-third of the total pack of the major vegetables. The supply of canned vegetables for civilians will be about equivalent to the average supply available for the 5-year period (1936-40), but less than in 1941. Civilian supply will be augmented by an increased volume of home canning. Increased consumer purchasing power will be an additional drain on the supplies of both fresh and processed vegetables.
3. There is likely to be a transportation problem in moving vegetables from producing areas to the consumer. Shipments by motortruck probably will be restricted by the tire shortage and regulations designed to conserve rubber and gasoline. Apparently there is no immediate shortage of refrigerator cars but locomotives to pull these cars may not be available when needed. Under present traffic demands the railroads are making use of all available locomotives. New equipment has been difficult to obtain because of the scarcity of metals.

The availability of sufficient transportation equipment to move these products during the coming season will depend in no small degree upon the extent to which cars are promptly loaded and unloaded and adequate truck conservation programs are speedily inaugurated. Areas depending in the past on itinerant truckers should set up concentration markets where small lots can be assembled in sufficient volume to be moved in carload or large truck-load lots, thereby making it possible to utilize both cars and trucks as efficiently as possible. Truckers will not be able to wander from farm to farm and area to area seeking loads. But if our transportation equipment is used as efficiently as possible there should be ample facilities for the coming season to move all the products which really make a significant contribution to a satisfactory diet.

4. The agricultural labor situation is critical in many commercial truck crop areas and, with continued demand for man power in the army and industry, probably will become more acute as time goes on. At the present time there is a definite threat of reduced acreages next season in those crops having the larger labor requirements.
5. The substitution of tractors and modern machinery for hand labor probably will not be significant because of the difficulty of acquiring new machinery.
6. Although some difficulty in obtaining wood crates is expected, the committee has assumed that adequate supplies of shipping containers will be available.
7. Nitrogenous fertilizer may be limited in supply but priority probably will be given to its use on vegetable crops. It is assumed that the supply of spray materials will be adequate.
8. The seed situation does not appear to be critical at present although the prices of certain vegetable seeds have increased tremendously over the 1941 level.
9. Prices received by growers in 1942 and earlier years have been taken into consideration in relation to the possibility of obtaining suggested increases in acreage for 1943. Farm prices of vegetables during the 1942 season, in general, have been high compared with other recent years. This favorable level of prices ordinarily would encourage increased plantings of most vegetables for the season just about to begin. Offsetting this, however, are farmers' doubts concerning the probable availability of needed labor and transportation. Prices received for cabbage and early onions were the chief exceptions to the generally favorable level of prices. Price-support should be considered only where the needed acreage is considerably greater than that expected. An early announcement would appear desirable for cabbage, onions, and carrots.

Aside from the above considerations the committee was guided in its recommendations by the following broad principles:

1. The desire to insure supplies of the major vegetables at least equal to the tonnage produced in recent years.
2. The necessity of lightening the transportation load; hence the recommendation to decrease acreages of the less essential crops produced at great distances from consuming centers.
3. The necessity of decreasing labor requirements by shifting, insofar as possible, from crops of large labor requirements to those that can be produced and harvested with less labor.

WINTER AND SPRING VEGETABLES

Because of the year-round production of commercial vegetables, with clearly defined winter-producing areas as distinct from summer areas, it is more satisfactory to consider the acreages for winter and spring harvest apart from those grown for summer and fall harvest. Slightly more than half the total commercial acreage in the country in 1942 was grown for winter and spring harvest in the following 10 States: California, Texas, Florida, South Carolina, North Carolina, Georgia, Arizona, Louisiana, Alabama, and Mississippi.

In table 1 the acreages suggested for these 10 States for the winter and spring harvest of 1943 are shown. For the 19 crops combined the suggested acreage for 1943 is 3 percent less than the harvested acreage of 1942. But excluding cantaloups and watermelons, which are harvested mostly in the early summer, the 1943 acreage of winter and spring vegetables is 1 percent larger than that of 1942 and is 6 percent greater than the 5-year average. In actual acres the aggregate acreage (excluding cantaloups and watermelons) totals 794,000 for 1943 compared with 788,000 in 1942 and the 5-year average of 752,000.

The major increases in the winter and spring acreages are recommended for carrots, green lima beans, snap beans, and onions, in the order named. Significant decreases are suggested for cauliflower, cucumbers, cantaloups, celery, eggplant, watermelons, lettuce, and green peppers, in order. The recommended acreages for green peas, cabbage, tomatoes, beets, spinach, and asparagus show little or no difference from those harvested in 1942. Some difficulty may be experienced in obtaining the suggested increases or even in maintaining acreages at the 1942

level for certain crops. Following is the list of the more important crops with brief suggestions regarding the acreage of each:

CARROTS: Produced mostly in California, Texas, and Arizona. Growers' prices in 1942 were 49 percent above the 5-year (1936-40) average for a crop that was 16 percent above average. Since the carrot is considered a desirable food product which is less bulky and less perishable than many other vegetables, it is believed that a material increase in production is justified. Increases in all producing States are suggested. For the whole group of States, the suggested acreage for 1943 is 29 percent larger than that of 1942 and, under average growing conditions, would produce a crop 28 percent larger than harvested in 1942. It is recommended that the tops be removed before shipping in order to make a more efficient use of transportation facilities.

If it is not feasible to expand processing facilities a price supporting program may be necessary to obtain the suggested increase in acreage.

GREEN LIMA BEANS: Under average growing conditions the suggested increase of 25 percent in acreage would give a crop about one-half larger than both the average crop and the 1942 crop. This increase seems justified, however, because of the high nutritional value of this vegetable and also because the relatively small acreage is grown in States (Fla., Ga., S.C. and N.C.) that are relatively near consumption centers. The good prices received in 1942 probably will stimulate some increase in the planted acreage for 1943.

SNAP BEANS: Acreage and production in 1942 were slightly below average and the price to growers was 59 percent above average. A 15-percent increase in acreage and production in 1943 seems necessary to meet consumer requirements. More than half of this acreage would be grown in Florida; only 6 percent would be grown outside the Southern States. If surpluses develop these probably could be diverted to canning plants.

ONIONS: The production of early and intermediate onions in Texas, California, Louisiana, and Georgia, was large in 1942 (24 percent above average) and prices received by growers during the last half of the season in Texas and Georgia were low. It was necessary for the Government to assist the growers by making purchases for relief and designating onions as a Victory Food Special.

A supply in 1943 about 12 percent above average but 10 percent below production in 1942 seems desirable for consumption requirements. Under average growing conditions the production of this supply would require a 14 percent increase over the 1942 acreage. Unless steps are taken to encourage growers to increase plantings in 1943 it is probable that acreage will be decreased, particularly in Texas and Georgia.

CABBAGE: Because of the low prices received for the bumper crop of 1942 growers probably will decrease acreage in 1943. It seems desirable, however, to maintain the acreage at the 1942 level in order to assure an adequate supply in 1943. Exceptionally high yields per acre were partly responsible for the big crop this year. With average yields the 1942 acreage would have produced a crop 20 percent smaller than was actually obtained, but 16 percent above the 5-year average. A crop 20 percent less than production in 1942 probably could be marketed at fairly good prices, considering the high level of consumer purchasing power.

It is believed that the maintenance of cabbage acreage at the 1942 level will require some assurance of a price supporting nature.

SPINACH: Most of the early acreage is grown in Texas, with small acreages in California and Louisiana. Due to a large acreage and a high yield per acre, a bumper crop was produced in 1942. A smaller acreage is in prospect for 1943 because of the high price of seed and high labor costs in relation to prices received by growers in 1942.

The committee believes, however, that the acreage should be maintained at the 1942 level in order to insure an ample supply of this green leafy vegetable. Such an acreage would be only 6 percent above average and under average growing conditions would produce a crop 7 percent larger than the 1936-40 average production.

GREEN PEAS, BEETS, AND TOMATOES: Prices were good for these crops in 1942 and acreages probably will be maintained in 1943. For green peas it is suggested that more of the acreage be grown in southern States near consuming centers and that a small

decrease be made in California. For beets, an acreage the same as that of 1942 would produce, with average yields, a crop 10 percent above average. Tomato growers probably will try to increase acreage in 1943. It is suggested, however, that the acreage be held at the 1942 level in all States because of the semi-luxury nature of "green-wraps." An average yield per acre on this acreage would result in a crop 16 percent larger than that of 1942 and 10 percent above average.

ASPARAGUS AND ARTICHOKE: Acreage for 1943 is already planted.

OTHER CROPS: Decreased plantings, ranging from 15 to 23 percent below the 1942 acreages, are recommended for other winter and spring vegetables, consisting of green peppers, lettuce, watermelons, eggplant, celery, cantaloups, cucumbers, and cauliflower. Decreases are suggested for each of these crops in almost every producing State, although the most drastic cuts are recommended for the areas that are more distant from consuming centers. Some of these winter vegetables fall in the semi-luxury class and others, although a popular part of the American diet, are believed to be less essential than those crops for which the suggested acreages are larger or equal to the 1942 plantings. By decreasing acreages of these crops it is believed that transportation facilities will be conserved for the more essential foods.

PRODUCTION: On the combined acreage suggested for all commercial winter and spring vegetables for 1943, average growing conditions would give a total tonnage 10 percent less than the large production of 1942 and 2 percent smaller than the 5-year (1936-40) average production. But if watermelons and cantaloups are excluded from the totals the tonnage of the remaining crops would be 7 percent under the 1942 production but 9 percent above the 5-year average production.

SUMMER AND FALL VEGETABLES

The commercial or shipping acreages of summer and fall vegetables was slightly less than half the total commercial acreage grown in the country during 1942. These crops are grown commercially in 33 States, including some summer and fall acreage also grown in 6 of the winter vegetable States.

Table 2 shows the suggested acreages for 1943, by crops, with comparative data for 1942, 1941, and the 5-year average. The aggregate acreage of the 20 crops for 1943 is 2 percent larger than the 1942 acreage and the 5-year average. Excluding cantaloups and watermelons, the aggregate acreage of the remaining crops is 4 percent larger than in 1942 and is 9 percent above average. In actual acres, the total of these crops (excluding cantaloups and watermelons) is 664,000 acres for 1943 compared with 636,000 acres in 1942 and the 5-year average of 610,000 acres.

As in the case of winter and spring vegetables, substantial increases in acreage are suggested for carrots, snap beans, and lima beans, along with a moderate increase in onion acreage. Increases are also recommended for kale, beets, sweet corn, tomatoes, cabbage, and spinach. Green peas and asparagus acreages are recommended at approximately the 1942 levels. Decreases in acreage are believed to be desirable for celery, cucumbers, watermelons, cantaloups, lettuce, eggplant, cauliflower, and green peppers, in the order named.

CARROTS: Since the late crop furnishes most of the carrots used for canning, and military requirements of canned carrots will be large, a substantial increase in production is recommended. The suggested production is about a third larger than the crop of 1942 and the recommended acreage for producing this crop is 35 percent greater than the 1942 acreage. Increases are suggested for each State and particularly for those States in which decreases are suggested in the celery acreage. Canning operations probably will take care of the surplus production, if any.

KALE: A green leafy crop of relatively small acreage produced near consuming centers. A substantial increase in acreage is necessary to insure a production of average volume.

SNAP BEANS: This is an important summer and fall crop which is grown throughout the northern States and in a number of southern and western States. Because of a 10-percent increase in acreage and exceptionally good yields in 1942, supplies in most States have been abundant. But these supplies have been readily absorbed into consumption at good prices and an equally large production seems essential for 1943. A 17-percent increase in acreage is

recommended. This acreage, with average growing conditions, would produce a crop slightly larger than that of 1942. Should surplus supplies develop, these probably could be diverted to canning plants.

GREEN LIMA BEANS: This is a relatively small acreage grown near the centers of consumption, and a 15-percent increase in acreage seems necessary to insure a crop as large as those of 1942 and 1941.

BEETS: This crop also has a small acreage grown in nearby areas. The suggested increase of 12 percent in the 1943 acreage seems necessary to maintain supplies in line with those of 1942.

SWEET CORN: The fresh market acreage is mostly in New Jersey and New York. A 12-percent increase in acreage seems necessary to produce, under average growing conditions, a crop in line with those of 1942 and 1941.

TOMATOES: This is an important summer and fall crop and has a wide distribution. Increases in acreage are suggested for virtually every State with the most pronounced increases recommended for States near the eastern centers of consumption. Due to the high yields per acre obtained in 1941 and 1942 an over-all increase of 11 percent in acreage is suggested for 1943 in order to maintain the level of production of the last two seasons. Any surplus production probably could be diverted to canning plants.

CABBAGE: In terms of acreage and tonnage, cabbage is the most important summer and fall vegetable. It is also a valuable source of vitamin C. It seems essential, therefore, to maintain the production of this crop at a relatively high level.

Although an average acreage was planted in 1942, high yields per acre resulted in a crop 15 percent above average and 7 percent larger than production in 1941. Prices of late domestic cabbage have been low because of the reluctance of kraut packers to make open-market purchases. Consideration of a desirable production for 1943 must take into account the uncertainty regarding kraut packers' operations, since these packers usually utilize about half of the late domestic cabbage crop for the manufacture of kraut.

It seems necessary to suggest desirable acreages for three categories of acreage. For the summer or intermediate crop, a 4-percent increase in acreage seems necessary to maintain production at the 1942 level, which was about equal to the 5-year average production.

For the late domestic crop, which is harvested and marketed during the late summer and fall, an 8 percent increase in acreage is suggested. This acreage, under average growing conditions would produce a 7-percent smaller crop than in 1942, 10 percent smaller than in 1941, but about 5 percent above average. Should kraut packers fail to take the usual proportion of this production some type of price supporting program may be necessary.

For the late Danish or winter storage crop, a 10-percent increase in acreage is recommended. This acreage, with average growing conditions, would produce a crop 10 percent smaller than that of 1942 but 21 percent greater than average. This increase over the average production seems justified in the light of possible restrictions in transportation facilities for moving competing early cabbage from Texas and Florida.

For the over-all picture of summer and fall cabbage the suggested acreage for 1943 is 8 percent larger than that of 1942 and the probable production is 7 percent smaller than in 1942 but is 6 percent above the average production.

ONIONS: For the intermediate or summer crop, a 9-percent decrease from the exceptionally large acreage of 1942 is recommended. This acreage, with average growing conditions, would produce a crop even larger than that of 1942 and 24 percent above average.

For the late, or storage crop, a 10-percent increase in acreage is suggested. Under average growing conditions this acreage would produce a crop 6 percent larger than in 1942 and 13 percent more than average. It is believed, however, that this production would be absorbed without any price supporting measures.

The over-all picture is for a summer and late onion acreage 7 percent larger than that of 1942 and for a probable production 6 percent more than the crop of 1942 and 13 percent above average.

SPINACH AND GREEN PEAS: Although slight increases in acreage are suggested, production in 1943 probably will be somewhat less than in 1942 because of the good yields per acre obtained this season. Compared with the average production, the 1943 crop of peas probably will be smaller, whereas spinach production is likely to be considerably larger.

ASPARAGUS: The acreage for harvest in 1943 is already planted and probably will not differ greatly from that of 1942.

OTHER CROPS: As in the case of winter and spring vegetables, decreases in acreage are suggested for certain crops that seem less important in the present emergency than those discussed above. With the exception of celery, cucumbers, watermelons, and cantaloups, however, the recommended decreases are less drastic than the decreases suggested for the winter and spring producing areas. More moderate decreases are recommended for green peppers, cauliflower, eggplant, and lettuce because most of the summer and fall acreages are nearer the centers of consumption than is the case for the winter and spring producing areas.

PRODUCTION: Including cantaloups and watermelons, the combined acreage of summer and fall vegetables suggested for 1943 would produce, under average growing conditions, a tonnage 8 percent smaller than in 1942 but 2 percent greater than average. Excluding cantaloups and watermelons, the combined tonnage of the remaining crops would be 9 percent less than production in 1942 but 7 percent above the average production.

TOTAL ACREAGE AND PRODUCTION (Winter, Spring, Summer, and Fall)

Including cantaloups and watermelons, the suggested total acreage for harvest in 1943 is 1 percent less than the 1942 acreage and is 2 percent under the 5-year (1936-40) average. Excluding these two crops, the suggested acreage of the remaining 19 is 2 percent greater than in 1942 and is 7 percent above average.

The estimated tonnage on this suggested acreage, assuming average growing conditions in 1943 and including cantaloups and watermelons, is 9 percent under the production of 1942 and is about the same as the 5-year average. Excluding cantaloups and watermelons, the estimated tonnage is 7 percent under the 1942 production but is 8 percent above average.

Table 1.- Commercial truck crops: Suggested acreages for winter and spring harvest

Commodity	Average 1936-40	1941	1942	1943	1943 as percentage of 1942
	Acrea	Acrea	Acrea	Acrea	Percent
Carrots	33,556	38,860	38,400	49,700	129
Beans, lima	7,710	12,300	9,600	12,000	125
Beans, snap	111,560	111,850	109,150	125,400	115
Onions	75,700	40,330	65,600	74,700	114
Green peas	62,064	47,200	44,900	45,200	101
Cabbage	74,930	62,820	86,080	86,500	101
Tomatoes	122,560	116,800	138,100	138,100	100
Beets	8,274	9,670	9,150	9,150	100
Spinach	45,898	39,700	48,750	48,500	99
Asparagus	37,004	45,940	45,420	44,600	98
Artichokes	9,940	10,000	9,600	8,800	92
Green peppers	11,856	13,320	12,270	10,450	85
Lettuce	86,376	92,780	101,280	86,100	85
Watermelons	199,420	197,800	152,100	126,300	83
Eggplant	2,026	2,000	2,800	2,300	82
Celery	21,410	21,820	23,130	18,750	81
Cantaloups	66,940	76,320	61,550	49,500	80
Cucumbers	25,396	25,600	26,150	20,500	78
Cauliflower	15,860	17,380	17,460	13,500	77
Total	1,018,480	982,490	1,001,490	970,050	97
Total excluding: cantaloups and watermelons	752,120	708,370	787,840	794,250	101

Bureau of Agricultural Economics.

Table 2.- Commercial truck crops: Suggested acreages for summer and fall harvest

Commodity	Average 1936-40	1941	1942	1943	1943 as percentage of 1942
	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Percent</u>
Carrots	8,840	10,690	12,170	16,400	135
Kale	1,080	1,100	900	1,100	122
Beans, snap	59,390	61,760	(68,120)	80,000	117
Beans, lima	5,390	6,450	(6,250)	7,200	115
Beets	2,800	3,100	3,200	3,600	112
Corn, sweet	(44,000)	43,000	44,600	50,000	112
Tomatoes	80,880	84,770	89,800	100,000	111
Cabbage	115,970	118,480	115,300	124,600	108
Onions	61,430	56,100	65,230	70,100	107
Spinach	19,240	22,100	(24,070)	24,500	102
Peas, green	50,590	47,410	37,810	38,000	101
Asparagus	33,010	41,780	44,330	44,330	100
Peppers, green ..	8,790	9,750	9,750	9,300	95
Cauliflower	13,960	15,420	15,930	14,000	88
Eggplant	1,170	1,500	1,400	1,200	86
Lettuce	70,740	66,090	60,380	51,900	86
Cantaloups	49,540	46,900	41,230	35,000	85
Watermelons	70,180	69,830	56,940	48,000	84
Celery	18,640	19,870	19,340	15,000	78
Cucumbers	14,560	16,970	17,620	13,000	74
Total	730,200	743,070	734,370	747,230	102
Total excluding: cantaloups and watermelons	610,480	626,340	636,200	664,230	104

Bureau of Agricultural Economics.

Table 3.- Commercial truck crops: Suggested total acreage for harvest

Commodity	Average 1936-40	1941	1942	1943	1943 as percentage of 1942
	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Acres</u>	<u>Percent</u>
Carrots	42,396	49,550	50,570	66,100	131
Kale	1,030	1,100	900	1,100	122
Beans, lima	13,100	18,750	(15,850)	19,200	121
Beans, snap	170,950	173,610	(177,270)	205,400	116
Corn, sweet	(44,000)	43,000	44,600	50,000	112
Onions	137,130	96,430	130,830	144,800	111
Cabbage	190,900	181,300	201,380	211,100	105
Tomatoes	203,440	201,570	227,900	238,100	104
Beets	11,074	12,770	12,350	12,750	103
Peas, green	112,654	94,610	82,710	83,200	101
Spinach	65,138	61,800	(72,820)	73,000	100
Asparagus	70,014	87,720	89,750	88,930	99
Artichokes	9,940	10,000	9,600	8,800	92
Peppers, green ..	20,646	23,070	22,020	19,750	90
Lettuce	157,116	158,870	161,660	138,000	85
Eggplant	3,196	3,500	4,200	3,500	83
Watermelons	269,600	267,630	209,040	174,300	83
Cauliflower	29,820	32,800	33,390	27,500	82
Cantaloups	116,480	123,220	102,780	84,500	82
Cucumbers	39,956	42,570	43,770	33,500	77
Celery	40,050	41,690	42,470	33,750	79
Total	1,748,680	1,725,560	1,735,860	1,717,280	99
Total excluding: cantaloups and watermelons	1,362,600	1,334,710	1,424,040	1,458,480	102

Bureau of Agricultural Economics.

Table 4.- Commercial truck crops: Estimated production from winter and spring harvest

Crop	Average 1936-40	1941	1942	1943	1943 as percentage of 1942
	Tons	Tons	Tons	Tons	Percent
Lima beans	8,352	9,232	8,848	13,056	148
Carrots	300,525	334,250	347,225	444,825	128
Tomatoes	332,522	264,232	316,304	365,965	116
Snap beans	129,585	135,975	126,300	144,840	115
Asparagus	33,576	40,116	40,560	40,680	100
Beets	30,602	35,230	35,334	33,774	96
Spinach	65,088	60,390	75,888	69,840	92
Artichokes	18,060	14,000	17,280	15,840	92
Green peppers	31,062	30,250	30,425	27,425	90
Green peas	63,555	49,740	54,810	47,460	87
Cauliflower	88,670	84,564	88,596	75,424	85
Onions	166,550	112,750	207,200	176,750	85
Lettuce	400,330	423,360	474,390	397,775	84
Eggplant	8,036	5,544	9,273	7,590	82
Cabbage	373,040	336,000	539,400	432,500	80
Cantaloups	255,090	270,990	237,330	188,580	79
Watermelons	556,362	527,350	472,625	352,062	74
Celery	271,035	308,655	342,675	253,125	74
Cucumbers	56,520	69,000	63,720	45,744	72
Total	3,188,560	3,111,628	3,488,183	3,133,255	90
Total excluding: cantaloups and watermelons	2,377,108	2,313,288	2,778,228	2,592,613	93

Bureau of Agricultural Economics.

Table 5.- Commercial truck crops: Estimated production from summer and fall harvest

Crop	Average 1936-40	1941	1942	1943	1943 as percentage of 1942
	Tons	Tons	Tons	Tons	Percent
Kale	3,771	5,148	2,232	3,852	173
Carrots	85,325	109,425	119,200	158,250	133
Cauliflower	71,354	79,050	60,514	71,484	118
Onions	636,350	594,150	680,250	721,800	106
Beans, lima	6,256	8,192	(8,000)	8,416	105
Asparagus	46,980	60,168	61,488	63,300	103
Beets	19,968	20,826	24,908	25,636	103
Corn, sweet	(97,500)	95,160	101,696	97,500	96
Tomatoes	319,192	381,680	415,494	394,850	95
Cabbage	869,100	934,500	1,005,400	934,500	93
Peas, green	73,005	78,195	(60,210)	54,720	91
Spinach	46,710	52,767	(65,718)	59,535	91
Cantaloups	155,550	129,600	122,340	110,250	90
Peppers, green ..	28,088	33,175	(33,438)	29,762	89
Watermelons	323,525	314,050	253,200	221,400	87
Eggplant	5,198	5,940	6,352	5,330	84
Cucumbers	41,352	45,792	(45,600)	36,816	81
Beans, snap	84,525	82,515	112,000	114,000	102
Lettuce	362,355	387,450	(400,120)	265,195	66
Celery	232,605	282,915	(285,165)	186,975	66
Total	3,508,709	3,700,698	3,863,325	3,563,571	92
Total excluding: cantaloups and watermelons	3,029,634	3,257,048	3,487,785	3,231,921	93

Bureau of Agricultural Economics.

Table 6.- Commercial truck crops: Estimated production from all acreage harvested

Crop	Average 1936-40	1941	1942	1943	1943 as percentage of 1942
	Tons	Tons	Tons	Tons	Percent
Kale	3,771	5,148	2,232	3,852	173
Carrots	385,850	443,675	466,425	603,075	129
Beans, lima	14,608	17,424	16,848	21,472	127
Beans, snap	214,110	218,490	238,300	258,840	109
Tomatoes	651,714	645,912	731,798	760,815	104
Asparagus	80,556	100,284	102,048	103,980	102
Onions	802,900	706,900	887,450	898,550	101
Beets	50,570	56,056	60,242	59,410	99
Cauliflower	160,024	163,614	149,110	146,908	99
Corn, sweet	97,500	95,160	101,696	97,500	96
Artichokes	18,060	14,000	17,280	15,840	92
Spinach	111,798	113,157	141,606	129,375	91
Peppers, green ..	59,150	63,425	63,863	57,187	90
Peas, green	136,560	127,935	115,020	102,180	89
Cabbage	1,242,140	1,270,500	1,544,800	1,567,000	88
Cantaloups	410,640	400,590	359,670	298,830	83
Eggplant	13,234	11,484	15,625	12,920	83
Watermelons	879,887	841,400	725,825	573,462	79
Lettuce	762,685	810,810	874,510	662,970	76
Cucumbers	97,872	114,792	109,320	82,560	76
Celery	503,640	591,570	627,840	440,100	70
Total	6,697,269	6,812,326	7,351,508	6,696,826	91
Total excluding: cantaloups and watermelons	5,406,742	5,570,336	6,266,013	5,824,534	93

Bureau of Agricultural Economics.

FRUIT PRODUCTION

Goals for the total production of fruit crops during any particular year are largely academic because the bearing surface of fruit orchards and vineyards cannot be altered measurably within a short time. Therefore, goals for fruit production acquire significance only when they are applied to a period of several years. Cultural practices do affect yields and production; and the volume of output during any crop year may be changed from the level indicated by weather conditions and bearing surface as cultural practices are intensified or relaxed.

Requirements for fruit supplies during and after the war point not only to the need for maintaining the present aggregate tree and vine plant, but also to the need for providing adequate supplies of fertilizers, insecticides, and fungicides to growers in order to insure the largest possible production of these fruits. Unless applications of fertilizer, especially nitrates, are continued, production will be drastically curtailed within a very short period of time. Spray materials must be made available to protect crops during the growing season; otherwise a large part of the production will be destroyed or rendered unfit for use by insects and diseases. It also will be necessary to take steps to insure adequate labor supplies for cultural, harvesting, and processing operations if maximum production is to be attained and the goals for processed fruits reached. Furthermore, in certain areas, transportation problems will arise and steps must be taken to prevent wastage because of inability to move fruit to consumers or processors. Since certain types of farm equipment will be less plentiful in 1943 than at present, greater care will have to be exercised in their use and some provision will need to be made for the securing of repair parts.

The 15.3 million-ton crop of 11 principal fruits during the current season, while ample to fill current requirements, does not appear excessive in view of current consumer purchasing power. This 1942 fruit crop, moreover, is 5 percent larger than that of last year and over 12 percent above the average production during the six years ending in 1941, when surplus removal programs often were found necessary for many of the principal fruit crops.

Next year fruit requirements for the military forces and for Lend-Lease shipment will exceed those of the present year, and domestic civilian demand for fruits probably will increase still further. It is reasonable to expect that civilian and governmental needs will be sufficient to require maximum supplies of fruits for the duration of the war. In addition, providing facilities for and control over foreign trade do not seriously interfere, it is likely that substantial European outlets for American fruits may be established for some time after the war, since the fruit producing areas in European and Mediterranean countries have been seriously affected by severe weather conditions and lack of proper cultural care.

Forecasts of production of the 11 major fruit crops (apples, apricots, cherries, figs, peaches, pears, plums and prunes, grapes, oranges, grapefruit, and lemons) for the 1943 crop year, assuming "average" growing conditions, are provided on the accompanying Table II. These forecasts are based upon present trends in bearing surfaces of the trees and assume no unusually favorable or unfavorable weather conditions which may drastically change the crop outlook. They assume that the care given to orchards in 1943 will be about the same as this year. Under these conditions, it seems likely that the aggregate production of these fruits next year will approach the 1941 level, which was some 700,000 tons less than this year. The production of deciduous fruits and grapes under such conditions would approximate the 1936-41 average, while citrus fruit production would exceed its 1936-41 average by more than one-fifth.

The disposition of supplies of fruit crops among the various channels of use is the primary consideration in developing marketing programs for these crops, and is of special importance during the emergency period. All of the fruit crops considered here are marketed in dried, canned, and fresh form with the exception of cherries and citrus fruits, which are not dried. Military and Lend-Lease requirements for dried and canned fruits in 1943-44 are substantially above those for the present year, and the provision of needed supplies of fruits in dried and canned form is considered to be one of the most important contributions of the fruit industry to the war effort.

The "goals" for 1943 are in terms of packs of dried fruit and of canned fruit and fruit juices. These goals are then expressed in terms of raw product utilized in dried or canned channels for 1943-44 in the accompanying Table II. The

attainment of these goals will require the drying of about 2,340,000 tons and the canning of about 2,100,000 tons of fruit next year--about the same as the aggregate volume of fruit canned and dried this year, but about one-quarter more than the average volume so utilized during the past six years. If these quantities are canned and dried, and a total of about 14,600,000 tons of these fruits is produced in 1943-44, about 10,000,000 tons will remain available for utilization in fresh and other forms, including frozen fruits, brined cherries, and apple cider and vinegar. This quantity is 7 percent below the supplies utilized in these forms this year and about equal to the average amount so utilized during the past six years.

Relatively low returns to berry growers this year, combined with added labor costs and the difficulty of obtaining labor, has resulted in reduced cultural care and some abandonment of acreages, particularly in the case of strawberries. Some consideration should be given to the desirability of encouraging increased packs of frozen berries in 1943, particularly in view of the probable shortage of canned fruits and fruit juices.

Dried Fruits

The 1942 dried packs of all grades of apples, apricots, figs, peaches, pears, prunes, and raisins combined is estimated currently at around 570,000 tons. Prunes and raisins together contribute over 80 percent of this total, and the production of raisins this year has been increased substantially as a result of War Production Board Order M-205-A, limiting the use of raisin variety grapes to the making of raisins in all instances where practicable. Price-support measures were adopted to encourage the maximum drying of fruits this year, and total dried fruit supplies will approximate the total requirements (governmental and civilian).

The total dried fruit requirements for military and Lend-Lease use out of the 1943 packs are more than one-third larger than those from the current packs, and, if all needs are to be met, even greater steps must be taken next year to encourage dried fruit production. Recommended pack goals are placed at 30,000 tons of apples, 30,000 tons of apricots, 33,000 tons of figs, 30,000 tons of peaches, 5,000 tons of pears, 200,000 tons of prunes, and 280,000 tons of raisins--slightly over 600,000 tons in all, compared with 570,000 tons this year and an average pack of 560,000 tons during the past six years.

These goals are placed at estimated maximum packs under conditions likely to prevail next year, and assuming average weather conditions. Clearly, every effort must be made to assure the drying of all of these fruits that is possible next year. To encourage such a program, it may prove advisable that the packs of canned apples, apricots, and California Freestone peaches be limited to governmental needs and that the use of raisin variety grapes again be limited to the making of raisins where practicable. Moreover, a production incentive program in the form of price-support measures to growers for dried fruits appears advisable.

Canned Fruits

Current estimates place the total 1942 pack of canned fruits and fruit juices at around 82,000,000 cases (No. 2-1/2-can basis). Of this quantity, over 23,000,000 cases probably will be bought for military and Lend-Lease requirements, leaving about 59,000,000 cases available for civilians and reserve stocks. Civilian "requirements" are estimated by the Office of Civilian Supply to be 55,000,000 cases, although current demands on the part of consumers for canned goods are such that certainly more than the 59,000,000 cases would be purchased at ceiling prices if they were to be made available to consumers this year. Average domestic use during the past six seasons was over 65,000,000 cases.

For next year governmental requirements are more than two-thirds larger than this year, with the result that the 1943 packs of canned fruits and fruit juices probably could not be increased to meet both governmental requirements and civilian "needs". It seems certain, therefore, that a larger portion of civilian requirements must take the form of fresh and dried fruit than in 1942-43.

The size of the 1943 canned fruit and fruit juice packs will be limited by many factors, among which the two most important are the governmental need for dried fruits and the shortage of steel for the manufacture of cans. The pack goals for canned fruits and fruit juices for 1943 are based upon the premise that (1) the drying outlet should be utilized to the maximum extent in view of the governmental needs for fruits in dried form and in view of the fact that drying uses little critical materials, and (2) supplies of tinplate will be made available to pack the quantities needed for governmental requirements and for limited civilian needs.

The recommended 1943 canned fruit and fruit juice pack goals are based upon the full utilization of the production plant to obtain the most essential foods. It is suggested that (1) tinplate be allocated to canners, for certain crops, on a basis which will insure the canning of all the production which cannot be efficiently utilized in other channels and (2) canning of all other fruits be restricted to Government orders. Where packs are restricted to Government orders, it is believed that the tree crops so restricted can be marketed in other forms, provided steps are taken to provide dehydration and other facilities well ahead of harvest time.

In view of the above considerations, the packs in tin for canned apples, apple-sauce, apricots, berries, Royal Anne cherries, figs, grapefruit segments, and plums and prunes should be restricted to government orders. Packs of lemon and lime juice and fruit nectars similarly are recommended to be restricted to government orders. For many of these commodities the limitation in packs below this year will be relatively small, since Government needs for next year will be larger than in 1942-43. The remainder of the principal fruit and fruit juice packs--peaches, pears, and grapefruit and combination citrus juice--should be provided tinplate in sufficient quantities to assure canning of all fruit which cannot be used in other forms. For example, the cold-packing of sour cherries should be encouraged to expand and tinplate provided to permit the canning of the remaining supplies which cannot be utilized in other channels. On the other hand, grape juice is packed in glass and requires no substantial quantities of critical materials.

The pack goals for items not restricted to government requirements, in terms of cases of No. 2-1/2 cans, are placed at 13 million cases of peaches, 7 million cases of pears, 15 million cases of grapefruit and combination citrus juice, 2.5 million cases of sour cherries, and 1.6 million cases of grape juice. With these packs, and if shipments of canned pineapple and pineapple juice to this country are maintained, some 72 million cases will be supplied for governmental and civilian needs. This quantity is about 13 million cases short of all needs.

Table I
Probable Pack and Disposition of Processed Fruits for 1943-44 with Comparisons
Confidential
Preliminary

Commodity	1942-43 (Estimated)										
	Average: Pack	Dom. Use	Pack	Military: Needs	Avail. for	Military: Needs	Avail. for	Goal	Needs	Avail. for	Civilians
	1	2	3	4	5	6	7	8	9	10	11
- - - million cases No. 2-1/2 cans - - -											
<u>Canned Fruits</u>											
Apples	2.3	2.2	4.0	3.1	1.4	0	1.7	2.0	2.0	0	.0
Applesauce	2.3	2.2	3.2	2.4	.7	0	1.7	1.3	1.3	0	.0
Apricots	3.4	2.9	4.3	2.7	.9	0	1.8	1.5	1.5	0	0
Cherries, sour	1.9	1.8	1.7	2.7	.8	0	1.9	2.5	1.1	.1	1.3
Cherries, sweet	.7	0	.7	.9	.4	0	.5	1.0	.6	0	.4
Figs	.4	0	.7	.5	.5	0	0	.5	.7	0	-.2
Fruit salad & cocktail	4.5	3.9	5.7	6.0	1.2	0	4.8	5.5	2.6	.3	2.6
Peaches, Cal. clings	10.4	9.2	10.6	13.0	3.4	.5	9.1	12.0	5.5	1.0	5.5
Peaches, other	1.8	1.8	4.1	2.0	0	0	2.0	1.0	0	0	1.0
Pears	5.4	4.3	6.6	6.5	2.1	0	4.4	7.0	3.0	.9	3.1
Plums & Prunes	1.3	1.8	2.3	.9	.6	0	.3	1.1	.9	.2	.0
Subtotal	34.9	30.1	44.1	40.7	12.0	.5	28.2	36.3	19.2	2.5	14.6
Five other fruits	15.1	15.1	15.0	12.8	3.6	0	9.2	10.0	5.5	0	4.5
Total fruits	50.0	45.2	59.1	53.5	15.6	.5	37.4	46.3	24.7	2.5	19.1
<u>Canned Fruit Juices</u>											
Grapefruit	7.7	7.2	11.6	13.0	2.8	.1	10.1	14.0	4.6	.1	9.3
Orange	2.0	2.0	3.0	2.0	.5	.5	1.0	3.0	.8	.6	1.6
Combination	.9	.9	1.6	2.0	0	0	2.0	2.0	0	0	2.0
Lemon & Lime	.2	.2	.3	.4	0	.1	.3	.3	0	.3	.0
Grape	2.0	2.0	2.5	2.5	.1	0	2.4	2.5	.1	0	2.4
Subtotal	12.8	12.3	19.0	19.9	3.4	.7	15.8	21.8	5.5	1.0	15.3
Pineapple & Fruit Nectar	7.5	7.5	7.9	8.5	1.0	0	7.5	6.0	1.7	0	4.3
Total	20.3	19.8	26.9	28.4	4.4	.7	23.3	27.8	7.2	1.0	19.6
Total Fruits & Juices	70.3	65.0	86.0	81.9	20.0	1.2	60.7	74.1	31.9	3.5	38.7
- - - thousands of tons - - -											
<u>Dried Fruits</u>											
Apples	20.5	11.1	18.2	20.0	18.3	9.0	-7.3	30.0	24.1	11.2	-5.3
Apricots	26.5	14.8	19.7	21.0	11.6	6.0	3.4	30.0	15.5	7.5	-7.0
Figs	28.5	28.5	32.8	37.0	0	0	37.0	33.0	0	0	33.0
Peaches	22.5	19.6	14.3	23.0	25.3	5.6	-7.9	30.0	33.5	7.0	-10.5
Pears	5.5	2.7	3.9	3.0	0	4.5	-1.5	5.0	0	5.6	-.6
Prunes	209.6	131.0	193.0	185.0	26.2	39.0	119.8	200.0	35.3	48.8	115.9
Raisins	224.0	165.3	209.0	285.0	22.7	66.0	196.3	280.0	31.1	82.5	166.4
Total Dried Fruits	537.1	373.0	490.9	574.0	104.1	130.1	339.8	608.0	139.5	162.6	305.9

Probable Production and Disposition of U.S. Fruit Crops for 1943-44 with Comparisons

Preliminary

Fruit	Production		Disposition		Production		Disposition	
	: Dried	: Canned	: Fresh/1	: Fresh/1	: Dried	: Canned	: Fresh/1	: Fresh/1
1	2	3	4	5	6	7	8	
--- thousand tons, fresh basis ---								
1936-37 to 1941-42 Average								
Apples	2,913	164	144	2,605	2,929	146	225	2,558
Apricots	240	146	65	29	214	108	77	29
Cherries, Sour	86	0	44	42	82	0	39	43
" Sweet	71	0	16	55	80	0	10	62
Figs	100	85	7	8	121	100	12	9
Peaches	1,421	124	316	981	1,787	85	400	1,302
Pears	727	30	181	516	728	20	257	451
Plums and Prunes	690	540	30	120	640	480	41	119
Grapes	2,491	896	8	1,587	2,728	836	18	1,874
Sub-total	8,739	1,985	811	5,943	9,309	1,775	1,087	6,447
Oranges	2,935	0	134	2,801	3,248	0	225	3,023
Grapefruit	1,441	0	619	822	1,520	0	724	796
Lemons	440	0	10	430	472	0	10	462
Sub-total	4,816	0	763	4,053	5,240	9	959	4,281
Total	13,555	1,985	1,574	9,996	14,549	1,775	2,046	10,728
1942-43								
1943-44 Forecast								
Apples	3,027	160	172	2,695	2,500	240	100	2,160
Apricots	233	116	51	66	230	165	27	38
Cherries, Sour	111	0	63	48	95	0	50	45
" Sweet	91	0	18	73	80	0	20	60
Figs	129	111	8	10	120	100	8	12
Peaches	1,575	126	393	1,056	1,650	165	341	1,144
Pears	739	16	224	499	700	28	234	438
Plums and Prunes	630	481	15	134	670	520	15	135
Grapes	2,596	1,440	10	1,446	2,675	1,120	10	1,545
Sub-total	9,131	2,150	954	6,027	8,720	2,338	805	5,577
Oranges	3,640	0	410	3,230	3,650	0	380	3,270
Grapefruit	1,950	0	900	1,050	1,700	0	900	800
Lemons	550	0	20	530	546	0	20	520
Sub-total	6,140	0	1,330	4,810	5,890	0	1,300	4,590
Total	15,271	2,150	2,284	10,837	14,610	2,338	2,105	10,167

1. Residual of production which in the case of most fruits consists primarily of the quantity used in fresh form but also includes processing other than canning or drying, such as making of apple cider and vinegar and freezing and brining of cherries.

Production Goals,
1943HAY CROP SEEDS

The hay crop seeds include the biennial and perennial legumes and perennial grasses that furnish the principal forage for livestock, and the soil-building crops primarily responsible for maintaining the high acre yields of feed crops in the Northeastern, Middle Atlantic and Midwestern States.

Supplies of legumes held by dealers and farmers at the beginning of the year were not materially different from those of a year ago. Stocks of alfalfa, red clover, sweetclover, and alsike clover totaled 73,000,000 pounds in 1941 and 65,000,000 pounds in 1942. Stocks of lespedeza increased to 22,000,000 pounds in 1942. There were 11,000,000 pounds of alfalfa imported during the last season, mostly from Canada, which were not calculated in the goals established for 1942 on January 12 of this year. Exports of alfalfa, red clover, and alsike clover were about as included in the January 1942 goals program.

1942 Production

The 1942 production of some seeds is still uncertain. The present estimates indicate that it will be less than the established goals, about 60 percent for alfalfa, 50 percent for red clover, 61 percent for alsike clover, 70 percent for sweet clover, and 92 percent for lespedeza. The total 1942 production of alfalfa, red, alsike, and sweetclover is only about 86 percent of the 1941 crop. This low production can be attributed principally to competition of other crops, mainly corn, soybeans, flax, and other vital annual war crops. There was definite assurance of the price of the competing crops, and no sure price of the hay crop seeds. Also, much of the acreage was used as forage for livestock and not sufficient acreage was left for seed production. For the immediate situation, this may seem the wise course of procedure, but unless the seeds are produced to maintain the forage crop acreage, there will be two results, decreased supplies of forage for livestock and a decline in the yield of the grain feed crops.

The supplies for the next year will be less than the desirable disappearance, except for lespedeza, mainly because of the short crop harvested this year. The supplies of sweetclover and alsike clover will be particularly short compared with the domestic consumption in 1935-40 and in 1941. The desirable requirements for 1943 will be fully as great as in recent years and considerably larger than the supplies. There is an increasing requirement for alfalfa, sweetclover and lespedeza. The use of large quantities of lime and phosphate has made it possible to grow alfalfa and sweet clover in areas where these seeds were not previously sown extensively, providing price relationships are satisfactory. The lend-lease, export and military requirements for legumes are expected to be about the same as during the past year if the war is continued.

The production and supply situation for grass seeds is much more satisfactory than for legume seeds. Production of all important grass seeds is considerably above the 5-year 1936-40 average. The timothy seed crop is 7 percent greater than the 1942 goal, while orchard grass is about 7 percent under the 1942 goal. Bluegrass production is over a third greater than the average crop from 1936-40. Most of the minor grasses in respect to seed production, including brome grass, crested wheat grass increased considerably above 1941 and the previous 5 years. Hence, supplies are adequate for a probable disappearance in 1942-43, considerably greater than the disappearance in 1941-42, and also in the previous 5 years. The increased disappearance is caused by military lend-lease and domestic farm needs. Lend-lease requirements alone are about 10 percent of the present crop. 1943 goals for all species listed, excepting timothy, bluegrass and crested wheatgrass, are set considerably above 1942 production in order to build up larger reserves for post-war use. Timothy and bluegrass goals are only slightly below 1942 production, while the crested wheatgrass goal is only a little more than 50 percent of the estimated 1942 crops. The production of this grass for seed has been expanding very rapidly in recent years. More attention should now be paid to planting it for hay, pasture, and range use.

Importance of Attaining 1943 Goals

The supply of nitrogenous fertilizers is limited. There is a serious shortage of farm labor. Yet the war demands greater production of food crops in 1943. To maintain and increase production per acre greater use must be made of legume and grass crops for their soil-building and labor-saving properties.

The very satisfactory production of feed and oil crops in 1942 is largely at the expense of stored fertility and is partially due to the plowing up of about 7 million acres of hay and pasture land in the Corn Belt. We must be prepared to seed increased acreages of hay and pasture in order to continue plowing up such productive acres. In the case of land not suitable for cultivation, it is necessary to increase pasture seedings on account of the renovation of old pastures and the establishment of new pastures on abandoned or waste land. We must be prepared for the probabilities of the war lasting 2 or 3 years longer.

Immediately following the war there may be a large demand for some of these seeds in the war-torn countries. As soon as production of food is restored in Europe, large acreages of cropland in the United States will need to be seeded to grass. Consequently, it is essential that we establish and maintain stock piles considerably above the present levels for all the hay crop seeds. In most cases these crops are established as rotation or perennial meadows and pastures, but the acreage must be left for seed production and not plowed for another crop or used for forage. The total acreage harvested for seed, about 5 million acres, is small compared to their importance in the agricultural economy.

Production Difficulties in 1943

Weather frequently affects seed production very much and is not subject to control, whereas other factors, such as price, labor and material required, can be controlled, at least to a limited extent.

The increased need for hay crop seed production in 1942 was pointed out to farmers, and seed dealers without securing the desired results.

The shortages of labor caused by military requirements and industrial competition, the limitations on fertilizers and the competition of other crops, indicate that 1943 production of hay crop seeds may be considerably less than in 1942. In the case of bluegrass and native grasses harvested by strippers, there is danger that operators will not be able to get sufficient tires and gasoline to move their equipment over the long distances necessary to reach the farms where seed is available.

The native grass seeds, such as the gamagrass and buffalo grass, needed for establishing turf on airfields and other military areas also present a problem in obtaining the equipment that is necessary.

Reaching 1943 Goals

The failure to attain goals for hay crop seeds is due principally to the competition of other crops for which guaranteed prices are offered either directly or indirectly. In the case of cover crop seeds for which minimum prices have been guaranteed, production on the whole was markedly increased.

It is very evident that there must be a definite financial incentive for the production of the hay crop seeds, such as seed harvesting payments, minimum prices and loans for storage. In doing this, additional incentive should be placed on the production of improved strains for the sake of greater efficiency in the use of our resources. Considering the guaranteed prices for other crops and the risk of carrying seed in storage for military lend-lease and post-war needs, there is no question that farmers will be more or less forced by present credit facilities to continue producing the crops carrying a guarantee.

Therefore, it is recommended that the following actions be taken to encourage producers to meet the 1943 production goals for legume and grass seeds which are necessary for the following year's seed requirement and to provide for adequate reserves:

1. That the Commodity Credit Corporation be directed to provide funds for purchases of and loans on legume and grass seeds as may be designated. In this connection an attempt should be made to increase the production and reserves of superior adapted varieties and strains of the designated seeds.
2. That the AAA provide payment for the harvesting of an acreage of legume and grass seeds under the agricultural conservation program as a soil-building practice. Under this practice an adequate payment differential should be made for the various types of seed based upon the relative need and the potential return per acre for each kind of seed.

In considering the purchase or loan price it should be pointed out that the establishment of ceilings may be necessary at a later date and that such action may materially influence the achievement of the goals. An effort should be made to correlate the loan or purchase price with the ceiling price in such a manner that producers and handlers will be given fair treatment.

Hay Crop seeds,

Production and Stocks; 1943-4

Commodity	1943		1943		Pounds
	Estimated : Stocks	Estimated : Production	Estimated : Production	Estimated : Yield per acre	
	6/30/42	goal	acres	goal	
1	2	3	4	5	
	Thousands				Pounds
Timothy	19,173	70,000	467.0	150	
Kentucky bluegrass	10,582	48,000	----	---	
Orchard grass	500	11,000	73.0	137	
Meadow fescue	122	2,000	6.7	300	
Brome grass	2,310	12,000	30.0	100	
Ryegrass (perennial)	245	3,000	13.9	216	
Crested wheatgrass	1,956	6,000	48.0	125	
Red fescue	- -	750	3.0	250	
Chowings fescue	- -	750	4.0	188	
Bermuda grass	- -	2,000	13.3	150	
Dallis grass	150	750	7.5	100	
Bahia grass	- -	50	2.0	250	

Table 1
Hay Crop seeds
Acres: Yields and Production 1936-40, 1941, 1942

Commodity	Year Begin- ning	Acres or Numbers			Unit	Yield			Production					
		1936-40	1941	1942		1936-40	1941	1942	1936-40	1941	1942			
		1	2	3		4	5	6	7	8	9	10	11	12
Thousands														
Pounds														
Timothy		454.0	370.4	437.7	Pounds	142.6	153.4	165.6		66,620	56,786	72,540		
Kentucky bluegrass		1	1		"	1	1	1		36,800	47,700	50,400		
Orchard grass (clean)		24.4	42.5	49.2	"	137.0	136.0	132.0		3,254	5,782	6,496		
Meadow fescue (clean)		1	1	1	"	1	1	1		575 1/2	750	930		
Bromegrass		1	1	1	"	400	450			1,150	4,000	6,000		
Ryegrass(perennial)Clean		4.6	12.5	13.2	"	216	184	212		925 4/4	2,300	2,800		
Crested wheatgrass		1	1		"	100 3/3	150			2,175 1/3	4,500	6,600		
Red fescue		1	1		"	300	1			20	90	200		
Chowings fescue		.8	2.3		"	188	182			145	420	420		
Bermuda grass		1	1		"	1	1			1	1,500	1,500		
Dallis grass		1	1		"	1	1			1	500	500		
Bahia grass		1	1		"	1	1			1	1	5		

1 No data. 2 1939 and 1940 only 3 1940 only Oregon alone. 4 4-year average.

Winter Cover Crop Seeds

Supplies, Production, Disappearance, and Stocks, 1942

Commodity	Unit	Year	Stocks	Production	Imports	Supplies	Commercial	Exports	Lease	Civilian	Military	Carry-Over
1	2	3	4	5	6	7	8	9	10	11	12	
	lbs.	July 1, 1942										
Austrian winter peas	"	"	1,181	131,990	-	133,171	-	-	90,166	-	43,005	
Hairy vetch	"	"	3,486	31,595	-	35,081	-	-	32,137	-	2,944	
Com. & Willamette vetch	"	"	2,201	22,110	-	24,311	-	3,000	16,311	-	5,000	
Purple vetch	"	"	364	9,740	-	10,104	-	-	8,136	-	1,968	
Hungarian vetch	"	"	1,000	10,800	-	11,800	-	-	10,000	-	1,800	
Crimson clover	"	"	3,428	10,410	-	13,838	-	200	11,075	-	2,563	
Lupines	"	"	-	600	246	846	-	-	600	-	246	
Rye grass	"	"	8,792	32,800	619	42,211	-	3,500	21,654	5,000	12,057	

Winter Cover Crop Seeds

Confidential
Work Sheet
Goals For 1943

Supplies, Production, Disappearance 1936-40, 1941

Commodity	Unit	1936-40					1941				
		Year	Stocks	Pro-	Import	Export	Disappear-	Carry-	Stocks	Pro-	Import
		Beginning	duction	ance	over	duction	pearance	over			
1	lbs.	2	3	4	5	6	7	8	9	10	11
(thousands)											
Austrian peas											
Hairy vetch											
Com. & Willa-											
mette vetch											
Purple vetch											
Hungarian vetch											
Crimson clover											
Lupines											
Rye Grass											

WINTER COVER CROP SEEDS

Supplies, Production, Disappearance, and Stocks, 1943

Commodity	Unit	Estimated Stocks	Estimated Production	Probable Imports	Probable Exports		Supplies	Estimated Production	Consumption		Estimated Carryover
					Commercial	Lease			Civilian	Military	
1	2	3 pounds	4 pounds	5 acres	6 thousands pounds	7 pounds	8 thousands pounds	9 pounds	10 pounds	11 pounds	12 pounds
Austrian Winter Peas		43,005	89,500	118	--	132,505	--	--	88,529	--	44,000
Hairy Vetch		2,944	45,797	219	--	48,741	--	--	40,724	--	8,017
Common Willamette Vetch		5,000	30,000	75	--	35,000	--	3,000	25,319	--	6,681
Purple vetch		1,968	8,730	22	--	10,698	--	--	9,000	--	1,698
Hungarian Vetch		1,800	11,000	24	--	12,800	--	--	9,000	--	3,800
Crimson Clover		2,599	18,000	67	--	20,599	--	200	15,616	--	4,783
Lupines		246	3,500	4	--	3,746	--	--	2,000	--	1,746
Ryegrass		12,057	30,000	75	--	42,057	--	3,500	22,237	5,000	11,320

Winter Cover Crop Seeds

Acres: Yields and Production 1936-40, 1941, 1942

Confidential
Production Data
Goals for 1943

Commodity	Year	begin-	Acres or Numbers			Unit	Yield			Production												
	ning	1936-40	1941	1942		1936-40	1941	1942	1936-40	1941	1942											
1	:	2	:	3	:	4	:	5	:	6	:	7	:	8	:	9	:	10	:	11	:	12
Austrian winter peas	:	:	:	37,316 (thousands)	:	50,500	:	137,400	:	:	:	773	:	Units 657	:	961 (thousands)	:	27,992	:	37,140	:	131,990
Hairy vetch	:	:	:	47,128	:	136,300	:	138,000	:	:	:	253	:	201	:	229	:	12,206	:	27,395	:	31,595
Com. & Willamette vetch	:	:	:	16,002 ^{1/}	:	58,500	:	65,100	:	:	:	481 ^{2/}	:	293	:	340	:	8,196	:	17,120	:	22,110
Purple vetch	:	:	:	3,705	:	15,400	:	21,500	:	:	:	476	:	280	:	453	:	1,494	:	4,310	:	9,740
Hungarian vetch	:	:	:	6,986	:	6,500	:	23,000	:	:	:	473	:	370	:	470	:	3,336	:	2,400	:	10,800
Crimson clover	:	:	:	14,393	:	29,000	:	38,800	:	:	:	271	:	234	:	268	:	2,902	:	6,780	:	10,410
Lupines	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	300	:	600
Rye grass (total)	:	:	:	45,906	:	82,500	:	97,200	:	:	:	:	:	:	:	:	:	20,175	:	26,300	:	32,800
Rye grass (common)	:	:	:	:	:	:	:	:	:	:	:	460	:	300	:	320	:	:	:	:	:	:
Rye grass (perennial)	:	:	:	:	:	:	:	:	:	:	:	216	:	184	:	212	:	:	:	:	:	:

^{1/} = 3 yr. average

^{2/} = does not include Willamette vetch.

FLY CROP SEEDS

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Goals for 1943

Production and Stocks, 1943-44

Commodity	1943		1943		Estimated Production Goal Yield per Acre
	Estimated Stocks 6/30/43	Production Goal - Lbs.	Estimated Production Goal - Acres	Estimated Production Goal - Lbs.	
	2	3	4	5	
	Thousands		Pounds		
Alfalfa	8,476	100,000	1,000	100	
Red Clover	10,121	120,000	1,500	80	
Alsike Clover	2,040	25,000	217	115	
Sweet Clover	4,553	70,000	424	165	
Lespedeza	20,021	200,000	985	203	
White Clover	895	1,750	19.4	90	
Ladino Clover	199	1,500	17.6	85	

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Supplies, Production, Disc. appearance 1936-40, 1941-42

1936-40															1941	
Commodity	Unit :(000)	Year :Beginning :7/1/42	Stocks :1/ :(000)	Pro- :duction :(000)	Imports :to 6/30 :(000)	Exports :to 6/30 :(000)	Disappear- :ance :9/1/41	Carry- :Over :6/30/41	Stocks :(000)	Produce- :tion (000) :1941	Imports :Yr. Ending :6/30/42 (000) :1941-42	Exports :1941-42 :(000)	Disap- :pearance :1941-42 :(000)	Carry-over :6/30/42 :(000)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Alfalfa	lbs.	Dealer	7,766	70,571	3,279	1,031	72,082	Farm Dealer	4,680 11,741 27,600	61,026	11,508	169 1/4 4/	75,810	2,340 10,636 15,000		
Rod Clover	"	"	11,938	84,155	4,630	372	87,873	"	12,544 1,800	91,512	2	8,165 1/4 4/	88,372	20,121 840		
Alsike "	"	"	2,409	21,319	899	714	22,218	"	4,283 5,700	19,116	0	1,758 1/4 4/	17,809	4,792 3,000		
Sweet Clover	"	"	10,064	60,300	5,866		65,135	"	7,835 1,600	48,720	897	--	51,497	8,655 10,000		
Lospedeza	"	"	13,008	128,400	0		132,242	"	2,291	169,251 180	--	--	151,111	12,031		
White Clover	"	"	592	559	1,491				355	1,347	319	992 5/8	350	859		
(clean)	"	"														
Leading Clover	"	"	2/	360	3/				31	700 3/4	--	--	532	199		
(clean)	"	"														

1/ Two year (1939-40) average.
2/ No data.
3/ Estimated basis certification records,
4/ Lend-Lease and private purchases to Feb. 5, 1942.
5/ Alsike-white mixtures.

Table 1. Numbers : Yields and Production 1936-40, 1941, 1942

Commodity	Year		Acres or Numbers				unit	Yield				Production			
	Beginning	Ending	1936-40	1941	1942	1943		1944	1945	1946	1947	1948	1949		
1	2	3	4	5	6	7	8	9	10	11	12				
Thousands															
pounds															
Thousand Pounds															
Alfalfa		710.5	791.0	2/		100.2	77.4	2/	70,571	61,026	60,000 2/				
Red Clover		1,262.7	1,445.9	3/		70.8	63.0	3/	84,155	91,512	70,000 3/				
Alsike Clover		191.3	118.5	93.9		115.2	161.4	163.8	21,319	19,116	15,408				
Sweetclover		369.6	357.7	257.4		165.0	136.2	174.6	60,300	48,720	44,898				
Lespedeza		603.6	801.9	4/		202.7	211.1	4/	128,376	169,251	185,000 6/				
White Clover (clean seed)		1/	16.3	21.9		1/	88.8	93.2	575	1,347	1,866				
Ladina Clover (clean seed)		1/	1/			85 5/	65 5/		360	700 6/	1,000 6/				

1/	No data
2/	Forecast Oct. 15
3/	Forecast Oct. 2
4/	Forecast Nov. 13
5/	Oregon only (clean seed)
6/	Estimated

HAY CROP SEEDS

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Supplies, Production, Disappearance, and Stocks, 1942-43

Commodity	Stocks 6/30/42	Production 1942	Imports 1942-43	Supplies :	Exports :	Lend- :	Consumption :	Disap- :	Carry-over 6/30/43		
	1	2	3	4	5	6	7	8	9	10	11
Timothy	3,375	12,058	72,540	nil	87,973		6,000	62,000	43	68,800	19,930
Kentucky Bluegrass	10,182	50,400	nil	60,582	500	2,500	45,000	2,000	50,000	10,582	
Orchard Grass (clean seed)	392	6,496	nil	6,888	--	5,000	1,362	26	6,388	500	
Meadow Fescue	169	930	43	1,442	--	784	200	36	1,020	122	
Brome Grass	2,159	(6,000)	4,501	12,660	--	--	10,000	350	10,350	2,310	
Rye Grass (perennial)	1/	2,800	271	3,071	250	1,500	1,000	76	2,826	245	
Crested wheatgrass	987	6,600	639	8,226	--	--	6,100	170	6,270	1,956	
Red Fescue	1/	200	10	210	--	--	200	10	210	--	
Chowings Fescue	1/	(420)	1,535	1,955	--	--	1,868	87	1,868	--	
Bermuda Grass	1/	(1,500)	None	1,500	--	--	1,160	340	1,500	--	
Dallis Grass	150 2/	(500)	729	1,379	--	--	1,229	--	1,229	150	
Bahia Grass	1/	(5)	58	63	--	--	63	--	63	--	

1/ No data.

2/ Estimated 28,000 held by one dealer in Montgomery, Alabama.

Production Goals,
1943O I L C R O P S

I. SUMMARY

Supplies and requirements for the three principal oilcrops--flaxseed, peanuts, and soybeans--are inseparably linked with the supply and requirement situation for fats and oils generally. This situation is presented in Table 1.

The Situation in 1942

Production of fats and oils from domestic materials for the year beginning July 1942 is estimated at 11.8 billion pounds. In addition, it is expected that about 50 million bushels of soybeans, equivalent to about 400 million pounds of oil, will be carried over into the 1943-44 season. Carry-over of soybeans normally is 1 million bushels or less. No reliable estimate of imports is possible in view of the uncertainties of the ocean shipping situation. But it is generally believed that total imports, including oil in seed, will not exceed 800 million pounds. The total new supply of fats and oils in 1942-43 (excluding soybeans not crushed) is estimated at 12.6 billion pounds.

The Food Requirements Committee last June recommended that factory stocks of fats and oils be built up to 3.5 billion pounds. The purpose of adding 1.5 billion pounds to normal factory stocks of about 2 billion pounds is to make a reserve supply available for meeting such contingencies as further material increases in lend-lease requirements, further loss of imports, or poor crops in 1943 or later. A recent order of the War Production Board will restrict manufacturers' use of fats and oils to specified percentages of the 1940 and 1941 average use under a domestic allocation program. This order has been made effective as of September 1, 1942. It will save approximately 500 million pounds of fats and oils in the current fiscal year. Factory stocks of primary fats and oils on July 1, 1943, with restricted consumption, probably will total 2.9 billion pounds. The 400 million pound oil equivalent of soybeans to be carried over into the next season would bring total stocks on July 1, 1943 to 3.3 billion pounds.

Requirements for 1943

Total requirements for fats and oils in 1943-44 under the domestic allocation program are tentatively estimated at 14.7 billion pounds. This includes 9.6 billion pounds for civilian consumption; 1.1 billion pounds for direct military use, 1.8 billion pounds for export, and 0.2 billion pounds to complete the Government stockpile. To meet this total, an estimated 10,325 million pounds probably will be available from imports, animal-fat production, and production of cottonseed, corn, olive, and tung oils. This would leave 2,375 million pounds to be obtained from domestic production of linseed, soybean, and peanut oils. (Requirements for domestically-produced castor beans are considered in a supplementary statement.)

Maximum requirements for linseed oil in 1943-44 are placed at 800 million pounds, of which at least 230 million pounds can be obtained from the large stocks of flaxseed expected to be on hand July 1, 1943, and from imports of flaxseed. With an estimated normal yield of 7½ bushels per planted acre, production of flaxseed in 1943 would amount to 32.6 million bushels if 4.5 million acres were planted. Production of linseed oil from domestic flaxseed, after allowing for seed requirements, would be about 570 million pounds.

For soybeans, requirements are conditioned by the physical limitations of crushing facilities in the principal producing area, and by difficulties in the transportation and storage situation. With an anticipated carry-over of about 50 million bushels, it is believed that soybean production in 1943 should be based on actual use, leaving the 50 million bushels (or their equivalent in new-crop beans) as part of the stockpile reserve. With an estimated normal yield of 18 bushels per harvested acre, and 9 million acres harvested, soybean production in 1943 would total 162 million bushels. Perhaps 27 million bushels would be used for seed and feed. This could leave 135 million bushels for crushing, from which about 1,215 million pounds of oil would be produced.

To make up the total requirement of 2,375 million pounds of oil from the three principal oilcrops, production of peanut oil in 1943-44 would have to total about 590 million pounds. Peanut oil is the most desirable of the food oils

Oilcrops (cont'd)

produced on a large scale in this country. It is believed that every effort should be made to obtain 5 million acres of peanuts harvested in 1943. With an estimated normal yield of 675 pounds per harvested acre and 5 million acres harvested, peanut production would amount to 3,375 million pounds. Approximately 1,450 million pounds would be required for the edible peanut trade, seed, and local use. This would leave about 1,925 million pounds for crushing, which together with the crushing of oilstock shelled peanuts rejected by the edible trade would yield about 590 million pounds of peanut oil.

Feasible Production in 1943

According to the report on Agriculture's Wartime Production Capacity, completed in August, it would be feasible in 1943 to plant 4.8 million acres of flaxseed, and to harvest 11.5 million acres of soybeans and 5.2 million acres of peanuts. These figures are all in excess of estimated requirements. However, in the case of peanuts, price relations in 1943 now seem likely to be less favorable to peanut production than previously estimated, particularly the relationship between prices of hogs and oil peanuts. Feed grain acreage has increased less in the South than livestock numbers and shortages of feed grains may be expected, especially in the Southeast.

Goals for 1943

The goals recommended for oilcrops in 1943 are the same as those indicated in the section on requirements; namely, 4.5 million acres of flaxseed planted, 9 million acres of soybeans harvested as beans, and 5 million acres of peanuts picked and threshed. These are the same as the goals adopted for 1942.

Difficulties Foreseen

The chief difficulty in 1943 will occur as a result of shortages of labor for digging and stocking peanuts and of peanut pickers, particularly in the newer areas. Increased supplies of such labor-saving equipment as 1- and 2-row cultivators, weeders, and side-delivery rakes also are needed in peanut producing areas. In the past, peanuts for oil have been grown mainly as an additional source of cash income, without material reduction in other enterprises. To attain the recommended goal in 1943, some substitution for other crops or enterprises will be required.

In view of the tight labor situation for peanuts and the probability that high prices for hogs next year will tend to result in an increase in "hogging off" operations, it may be desirable to increase the support price for peanuts for oil. This would also serve to put oil peanuts on a price basis more nearly competitive with short-staple cotton. An increase in the support price would result in an estimated cost of 5 to 15 million dollars, depending on whether the average support level were set at \$90 or \$100 per ton. This calculation is based on an estimated "free market" price of \$85 per ton and a harvest of 5 million acres of peanuts picked and threshed. The product of about 3 of the 5 million acres would be excess peanuts available for crushing.

Some doubt has been expressed as to the adequacy of the present support price of flaxseed if 4.5 million acres are to be planted in 1943. Wheat prices have advanced in relation to flaxseed prices since last spring, and it has been suggested that the price of flaxseed should be either at the parity level or at $2\frac{1}{2}$ times the price of wheat. However, wheat is restricted by allotments to 55 million acres, and no material increase in wheat is likely in 1943. Under this condition flaxseed will compete more directly with oats and barley than with wheat.

With increased emphasis on feed crops in the Corn Belt and the maintenance of present support prices for soybeans, it is likely that the acreage of soybeans harvested for beans will be less in 1943 than the 10.9 million acres indicated for harvest in 1942. This will be true particularly if hay and pasture conditions next summer are less favorable than they were this year. If soybean production in 1943 should equal the large crop in 1942 serious storage and transportation problems would result.

Oilcrops (cont'd)

II. THE SITUATION IN 1942

Supplies for 1942-43

Factory stocks of fats and oils on July 1, 1942 totaled 2.1 billion pounds, slightly less than the average for that date in recent years. In addition, 6.2 million bushels of flaxseed were on hand in all positions. Stocks of peanuts on September 1 were considerably below normal, and stocks of soybeans on October 1 probably will be small, totaling 2 or 3 million bushels.

Production of fats and oils from domestic materials in the year beginning July 1942 is expected to total about 11.8 billion pounds compared with 9.6 billion pounds a year earlier. The indicated production in 1941-42 and 1942-43, and expected production in 1943-44 are as follows:

Item	: 1941-42	: 1942-43	: 1943-44
	: Mil. Lb.	Mil. Lb.	Mil. Lb.
Butter	2,200	2,300	2,300
Lard, including rendered pork fat . . .	2,470	2,900	3,200
Neat's-foot oil.	5	5	5
Oleo oil, stock, and stearine.	155	175	185
Tallow, edible	102	110	115
Tallow, inedible, and greases.	1,670	2,000	2,000
Wool grease.	14	15	15
Marine animal Oils	180	150	150
Total Animal	6,796	7,655	7,970
Corn Oil	234	250	260
Cottonseed Oil	1,250	1,560	1,280 ^{1/}
Linseed Oil.	565	750	570 ^{2/}
Olive Oil.	6	10	5
Peanut Oil	62	460	590 ^{3/}
Soybean Oil.	720	1,080 ^{4/}	1,215 ^{5/}
Tung Oil	3	7	10
Total Vegetable	2,840	4,117	3,930
Grand Total.	9,636	11,762	11,900

- 1/ Assumes 11.5 million-bale cotton crop, 80 percent crush of cottonseed.
- 2/ Assumes 4.5 million planted acres of flaxseed, yield of $7\frac{1}{4}$ bushels.
- 3/ Assumes 5 million acres of peanuts picked and threshed, yield of 675 pounds.
- 4/ Assumes crush of 120 million bushels of soybeans.
- 5/ Assumes crush of 135 million bushels of soybeans.

Little is known with certainty concerning probable imports of fats and oils, and oil-bearing materials in the next year or two. Not counting the large flaxseed surplus in Argentina, perhaps 1 billion pounds of fats and oils potentially are available annually, but it is believed that shipping difficulties will limit imports to 800 million pounds, perhaps less. Imports will consist largely of copra from the South Seas and Ceylon, palm oil from West Africa, flaxseed from Canada and Argentina; castor beans, babassu kernels, oiticica oil, and cottonseed oil from Brazil; sunflower oil, rape oil, and neat's-foot oil from Argentina; with some imports of whale oil, fish-liver and fish oils, olive oil and tallow.

Utilization in 1942-43

Domestic disappearance of fats and oils for civilian use under the War Production Board allocation program in 1942-43 is expected to total 9.5 billion pounds, of which about 3.1 billion pounds would be for industrial products and about 6.4 billion pounds would be for food products and uses. Military requirements for fats and oils in 1942-43 are estimated on the basis of information furnished by the Army and Navy at approximately 700 million pounds, of which about 200 million pounds will be used in the manufacture of soap and something over 100 million pounds for paint and varnish. Nearly 400 million pounds, including butter, are required for food purposes.

Lend-lease exports in 1942-43 on the basis of present estimates, will amount to about 1.2 billion pounds of fats and oils. Approximately 600 million pounds will go to Russia, chiefly in the form of lard, vegetable oils, shortening, soap, and tallow. The remaining 600 million pounds will go to the United Kingdom and British forces in Egypt and the Near East, and will consist mainly of lard and margarine, with small quantities of oleo oil.

Oilcrops (cont'd)

Commercial exports in 1942-43 will total nearly 400 million pounds, with half the total going to Canada under special agreement. Exports to Canada will consist of about 123 million pounds of cottonseed, peanut, soybean, and sunflower oils, and will also include technical fats and oils such as coconut oil, palm oil, castor oil, rape oil, and inedible tallow. Other exports will go mostly to the Caribbean region and will consist chiefly of lard.

Total utilization of fats and oils in 1942-43 thus are estimated at 11.8 billion pounds. With a total new supply of 12.6 billion pounds, 800 million pounds will be available for adding to stocks. Factory stocks of primary fats and oils, which on July 1, 1942, amounted to 2.1 billion pounds, would be increased to 2.9 billion pounds by July 1, 1943.

If 12 million bushels of flaxseed are imported in 1942-43, stocks of flaxseed in all positions probably will total 15 to 16 million bushels on July 1, 1943, compared with 6 million bushels a year earlier, and a July 1 average of 3 million bushels for 5 years 1936-40. Peanut stocks probably will be about at average levels at the end of the 1942-43 season. But present indications point to a carry-over of about 50 million bushels of soybeans, equivalent to about 400 million pounds of soybean oil (assuming that the beans would have to be processed if necessary in Southern hydraulic-press mills where the yield of oil probably would not exceed 8 pounds per bushel.)

Production and Distribution Problems in 1942-43

Continued improvement in flaxseed prospects during August points to a 1942 crop of 42.5 million bushels, which would exceed all previous records. The indicated production is 35 percent above the 1941 production of 31,485,000 bushels and nearly four times the 10-year (1930-39) average production of 11,269,000 bushels. The 1942 acreage for harvest exceeds that of 1941 by 39 percent and the 10-year (1930-39) average by 148 percent. Approximately 4.7 million acres were planted to flaxseed, the highest on record and exceeding the goal of 4.5 million acres.

Production problems have been relatively minor in 1942, but a record crop, together with the pressure from other grains for tight bin storage, may create a farm storage problem particularly in Minnesota, the Dakotas, Montana, and Kansas. Small grain equipment may be used in the production of flax and the harvesting season does not conflict with wheat. Consequently, labor and machinery problems have been minor.

Prospective production of soybeans in the United States is the largest on record at 211 million bushels compared with 107 million bushels in 1941 and 77 million bushels in 1940. Indicated yield per acre is 19.5 bushels compared with 18.2 bushels in 1941 and the 10-year average of 16.1 bushels. Most of the acreage increases from 1941 occurred in the commercial soybean producing areas of the North Central states, but the greatest percentage increases in acreage were in the fringes of the above commercial areas and in the delta areas of Mississippi, Arkansas, and Louisiana. The United States acreage to be harvested for beans is placed at 10.9 million acres, an increase of nearly 86 percent over the 5.9 million acres harvested in 1941, or about 76 percent of the total acreage planted for all purposes compared with 59 percent last year. The minimum market price guarantee, the urge to meet the greatly increased production goal needed to further the war effort, and the favorable hay crop rather generally, are the main influences accounting for the tremendous increase in the acreage for beans this year.

The 5 million acre increase in soybeans was much more easily secured than the increase of 2 million acres in peanuts. Soybeans were better known, could be handled largely with existing machinery and not much more labor per acre than competitive crops. In many cases acreage came from harvesting for beans rather than for hay. Prices were also an incentive. Although shortage of combines may have limited soybean acreage in new areas to some extent, particularly on the smaller farms, lack of adapted oil-bearing seed was probably a larger factor in these areas.

Processing facilities appear to be the limiting factor in the production of oil from soybeans. It has been estimated that crushing capacity for approximately 107 million bushels of soybeans exists in the Corn Belt and nearby areas. A production of approximately 190 million bushels is expected for the seven Corn Belt States of Ohio, Illinois, Indiana, Michigan, Minnesota, Iowa, and Missouri. Taking into consideration needs for seed, it appears that probably over 60 million bushels of beans will need to be shipped out of the area or stored.

Oilcrops (cont'd)

The crushing of soybeans in Southern mills will necessitate considerable transportation expense. If soybeans are crushed in Southern mills, a decrease of about 10 percent in the oil yield can also be expected. Efficient crushing requires the use of the expeller type of mill or the solvent extraction process.

The production of peanuts for picking and threshing from the record 1942 acreage is expected to be 2,930 million pounds. This is about double the 1941 harvest. This year's crop is larger than that of last year by 39 percent in the Virginia-Carolina area, by 81 percent in the Southeastern area, and 287 percent in the Southwestern area. The Southern farmers' shift to peanuts in 1942 was a remarkable example of how drastic changes can be made under the stress of war needs. Even though the total acreage for nuts will fall nearly 1 million below the 5-million acre goal, an increase of well over 100 percent was achieved and much of it was planted by farmers to whom the crop was a new enterprise.

Increased plantings this spring were made chiefly by taking up the "slack" in land and labor in the prevailing farming systems. Much of the change was made by bringing idle cropland into cultivation and by displacing corn and summer legumes for hay. Peanuts have replaced cotton only in low yielding and high hazard cotton areas.

Price ratios favorable to hogs, local labor conditions, shortages of machinery, and the present grassy condition of peanuts has reduced earlier intentions to harvest peanuts in some areas. Peanuts require much more labor than soybeans or corn and under present production methods about one-half of the total labor requirements are for the digging and stacking operations. Since a large part of the crop may be lost if not dug within a 1 to 2 week period, availability of labor becomes an important element. This labor peak is further intensified by the competition in some areas with cotton picking.

The expanded peanut acreage is making conditions unfavorable to small producers in some areas where individual operators don't care to risk buying a picker. Sales of peanut pickers to private operators have not been as large as expected. Farmers have indicated a need for increased supplies of labor-saving equipment, especially 1- and 2-row cultivators, weeders, and side-delivery rakes. It is anticipated that processing facilities will be more than adequate to handle the 1942 crops.

III. THE SITUATION IN 1943

Requirements for 1943-44

With continued control over domestic consumption by means of the War Production Board allocation program, total requirements for fats and oils in the year beginning July 1943 are placed at 12.7 billion pounds. Approximately 200 million pounds would be required to complete the Government stockpile. Military requirements are estimated at 1.1 billion pounds, including 600 million pounds for food uses and 500 million pounds for soap, paint, and other industrial products. Lend-lease is tentatively estimated at 1.4 billion pounds, and commercial exports at 0.4 billion pounds, substantially the same as in 1942-43. Approximately 9.6 million pounds will be required for civilian consumption, although in view of rising consumer purchasing power and fixed retail prices (at ceilings) more probably would be consumed if available. At 9.6 billion pounds, civilian consumption would amount to 76 pounds per capita compared with 78 pounds per capita in 1941-42, and 73 pounds per capita in 1936-40.

Supplies for 1943-44

Factory stocks of fats and oils on July 1, 1943, under the operation of the allocation program beginning in September 1942 are expected to total about 2.9 billion pounds. In addition the equivalent of 0.4 billion pounds probably will be available in the form of excess soybeans. Stocks of flaxseed are likely to be considerably above average, totaling perhaps 15 million bushels, as compared with normal stocks of 3 to 4 million bushels, although the extent to which flaxseed stocks are built up will depend on how much of the 1942 export surplus in Canada of about 10 million bushels is imported in the current fiscal year.

Imports of fats and oils in 1943-44, including oil in seed, are highly problematical. In view of the uncertain shipping situation, the forecast of actual imports is placed at 0.8 billion pounds, although more probably could be obtained if ships were freely available.

With total requirements placed at 12.7 billion pounds, and an estimated importation of 0.8 billion pounds, approximately 11.9 billion pounds of fats and oils would need to be produced domestically in 1943-44. This compares with a

Oilcrops (cont'd)

domestic production of 11.8 billion in 1942-43, 9.6 billion pounds in 1941-42, and an average of 7.8 billion pounds in the 5 years 1936-40. Production in 1943-44 thus would be more than 50 percent greater than in the 1936-40 period.

As indicated in the table presented earlier, production of animal fats and oils in the year beginning July 1943 is expected to total about 8 billion pounds. Production of corn, cottonseed, olive, and tung oils is expected to total about 1.5 billion pounds. This would leave 2.4 billion pounds to be produced from domestic flaxseed, soybeans, and peanuts.

Requirements for Flaxseed, Soybeans, and Peanuts

Maximum requirements for linseed oil under the allocation program, including probable lend-lease, are placed at about 800 million pounds. This would be the product of about 42 million bushels of flaxseed. At least 7 million bushels can be imported in 1943-44, mainly from Canada. An additional 5 or 6 million bushels can be withdrawn from the large stocks expected to be on hand July 1, 1943. This would leave 29 or 30 million bushels to be obtained from domestic production. Adding in seed requirements of about 3 million bushels, 32 or 33 million bushels of flaxseed would have to be produced domestically in 1943. The normal yield of flaxseed per planted acre is estimated at $7\frac{1}{4}$ bushels. With 4.5 million acres planted to flaxseed, 32.6 million bushels would be produced. After deducting seed requirements, this quantity of domestic flaxseed would yield about 570 million pounds of oil.

With an expected 50 million bushel carry-over of soybeans this season, soybean production in 1943 should be held if possible within the limits of maximum processing capacity, with an allowance for seed and feed uses. A maximum annual capacity of about 100 million bushels is reported for soybean mills, located mostly in the North Central States. Perhaps 5 or 10 million bushels could be handled by flaxseed and copra mills in the North and East, and an additional 5 or 6 million bushels can be crushed by copra mills on the Pacific Coast. These mills taken together would account for 110 to 115 million bushels of soybeans, the oil and meal from which would be conveniently located with respect to consumption centers. A large unused crushing capacity exists in the South, but part of the oil and most of the meal produced from soybeans crushed in the South would have to be shipped to other areas for consumption. In view of the transportation and storage problems involved, as well as the cost of shipping soybeans from the principal producing area in the Midwest to the South for crushing, it is believed that it would not be practicable to count on the crushing of more than 20 or 25 million bushels of soybeans in the South. Maximum crushing capacity estimated on the basis of these considerations would be about 135 million bushels. Seed and feed requirements amount to 25 or 30 million bushels. Thus total requirements for new-crop soybeans in 1943 would be 160 to 165 million bushels.

Normal yields for soybeans is estimated to be 18 bushels per harvested acre. With 9 million harvested acres production would total 162 million bushels. A crush of 135 million bushels from this crop would yield about 1,215 million pounds of oil.

To make up the total requirements of 2.4 billion pounds of oil from the three principal oil crops, production of peanut oil in 1943-44 would have to total about 590 million pounds. Peanut oil is one of the most versatile of the edible oils, being preferred to cottonseed and soybean oils by food manufacturers in this country and in Europe. Peanut oil also possesses desirable qualities for textile uses for which cottonseed, soybean, and linseed oils are not suited.

It is likely, moreover, that whole peanuts will be required for lend-lease shipments to the United Kingdom if the movement of peanuts from India to the United Kingdom continues to fall below expectations. Every reasonable effort should be made therefore to obtain the original 5 million acre goal for peanuts harvested. With an estimated yield of 675 pounds per harvested acre and 5 million acres harvested, peanut production in 1943 would amount to 3,375 million pounds. Approximately 1,450 million pounds will be required for the edible peanut trade, seed and local use. This would leave about 1,925 million pounds for crushing, which together with the crushing of oilstock shelled peanuts would yield about 590 million pounds of peanut oil.

Feasible Production Goals, and Difficulties

Assuming 1943 farm programs are not greatly different than in 1942, it is estimated that it will be feasible to expand the flaxseed acreage to about 4.8

Oilcrops (cont'd)

million acres or slightly above the record 1942 seedings. Some of this increase will be made in Minnesota and the Dakotas but most of it will be in the winter flax area (California, Texas, and Arizona) where the 1942 program was announced too late to affect 1942 seedings and in the newer flax areas in northern Oklahoma where flaxseed production has been profitable in 1942. Some reduction in acreage is expected in Kansas unless weather conditions again prevent the seeding of winter wheat and in Montana where seeding conditions for flaxseed were abnormally favorable in 1942.

Although a slight expansion in acreage is considered feasible, the production of flaxseed in 1943 will be smaller than in 1942 if average yields prevail. Assuming an average yield of $7\frac{1}{4}$ bushels per acre, flaxseed production in 1943 would amount to about 35 million bushels. This appears to be slightly more than would be necessary to meet civilian and military requirements and provide an adequate stockpile. In view of the possibilities of Canadian imports and the availability of soybeans if unforeseen contingencies develop, the flaxseed goal recommended is at the same level as this year, namely, 4.5 million planted acres.

In 1943 approximately 11.5 million acres of soybeans for beans can be grown, but this might require more combines particularly in the East and South. Such a crop would produce about 204 million bushels of beans. A slight reduction in average yields is anticipated because of considerable expansion of acreage in the low yielding areas of the South.

Processing facilities represent the limiting factor in setting acreage goals for soybeans. It was felt by the Committee that about 135 million bushels represented the practical maximum limit of crushing capacity. Assuming 25 to 30 million bushels will be used for feed and seed, a total production of 160 to 165 million bushels would be needed if present ample stocks are maintained. Assuming an average yield of 18 bushels, this requirement could be met by harvesting 9 million acres of soybeans. This would be the same acreage goal as in 1942.

It is estimated that feasible peanut acreage would be slightly over 5 million acres under the assumed 1943 conditions. Much of the acreage increase would be located in the new producing areas and would come mainly from land now in feed crops or idle. Some cotton would be displaced in low yielding high hazard areas. In the old areas, shifts to peanuts have already reduced feed crops to a minimum in most sections. A moderate increase appears possible, however, in most of the established peanut areas in the Southeast where peanuts have been used mainly for hog grazing in the past. Materialization of such an increase will be affected by changes in the relative prices of peanuts for oil and hogs and the experience during the present harvesting season.

Under present prospective conditions for 1943, the estimates of feasible acreage may be higher than can be expected. The situation has changed in two important aspects:

1. In making the 1943 estimates, it was assumed that oil crops would again receive first priority as a war commodity and that agency programs would concentrate on increases in peanut acreages. With the present emphasis on meat animals and livestock products, many farmers will use additional acreage for livestock feed rather than peanuts. Present returns from peanuts for oil offer little competition to other cash crops in most areas.
2. Prospective prices for hogs, especially in the Southeast, are higher than was assumed in the War Production Capacity Study. For example, 1943 price assumptions for Georgis, Florida, and Alabama were as follows: \$11.31, \$10.53, and \$11.18; in addition labor supplies are likely to be less adequate than anticipated because of increasing military requirements.

In view of these circumstances, it seems likely that an estimate of feasible acreage of say 4.5 million acres would appear probable unless some special incentives are provided.

To avoid congestion of the transportation system and overloading of storage facilities that would appear likely if goals for soybeans were increased, approximately 5 million acres of peanuts would be required. This acreage would be the same as indicated for last year.

Oilcrops (cont'd)

Several production difficulties can be expected during the coming year. The production of peanuts requires a considerable amount of labor, especially during the harvesting season. Additional acreages of peanuts will add to the already high labor peaks in the South. Shortages of labor saving machinery, particularly weeders, 1- and 2-row cultivators, and side-delivery rakes, may prove a real obstacle to many farmers unless increased numbers of such equipment are made available. Feed grain acreage has increased considerably less in the South than livestock numbers and shortages of feed grains may be expected, especially in the Southeast. Estimates of feasible acreages assumed provision of low-cost feed in several of the State reports.

 PRODUCTION GOALS COMMITTEE FOR OIL CROPS

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Note: A separate report will be made on castor beans.
Supplementary tables are attached.

Table 1.- Estimated requirements for and supplies of fats and oils,
crude basis, year beginning July 1940-43Production Goals for
1943

Item	Average 1941	Year beginning July 1941	Year beginning July 1942	Year beginning July 1943
	Bil. lb.	Bil. lb.	Bil. lb.	Bil. lb.
Requirements				
Domestic Consumption:				
Civilian	10.3	1/ 10.3	1/ 9.5	1/ 9.6
Military	1.1	1.3	1.1	1.1
Total	10.4	10.6	10.2	10.7
Total per capita (pounds)	(78)	(79)	(76)	(79)
Exports:				
Commercial	.4	.2	1/4	.4
Lend-lease	1.1	.6	1.2	1.4
Total	.5	.8	1.6	1.8
Total Requirements	10.9	11.4	11.8	12.5
Supplies				
Imports, including oil in seed	1.8	1.7	2/ .8	2/ .8
Production from domestic materials:				
Animal Fats	6.5	6.8	7.7	8.0
Corn, olive, and tung oils	.2	.2	.3	.3
Cottonseed oil	1.3	1.3	1.5	1.3
Linseed Oil	.4	.5	.7	.6
Peanut Oil	1.1	1.1	.5	.6
Soybean Oil	.6	.7	5/ 1.1	1.2
Total Production	9.1	9.6	11.8	11.9
Total New Supply	10.9	11.3	12.6	12.7
Stocks, July 1, beginning of year	2.3	2.2	2.1	2.9
Stocks, June 30, end of year	2.3	2.1	2.9	3.1
Excess of soybeans in terms of oil	-	-	.4	.4
Total, June 30	-	-	3.3	3.5

Division of Statistical and Historical Research, Bureau of Agricultural Economics.

1/ Assumes restriction of consumption under domestic allocation program by War Production Board,
effective September 1, 1942.

Imports may be less than 800 million pounds if shipping conditions continue to deteriorate. ^{3/} Assumes 11.5 million-bale cotton crop, 80 percent crush of cottonseed. ^{4/} Computed on basis of 1942 production goals, with a yield of 7.25 bu. per seeded acre of flaxseed and a yield of 675 pounds per harvested acre for peanuts. ^{5/} Based on probable maximum crush of 120 million bushels in 1943-44. ^{6/} Total of unrounded numbers.

Table 2.- Oilcrops: Supplies, Production, Disappearance 1936-40, 1941

Commodity	Unit	Year		1936-40															1941														
		begin- ning	Stocks	Pro- duction	Import	Export	Disap- pearance	Carry- over	Stocks	Pro- duction	Import	Export	Disap- pearance	Carry- over	Stocks	Pro- duction	Import	Export	Disap- pearance	Carry- over													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15																			
Oilseeds																																	
Flaxseed	bu.	July	3.0	4.3	17.4	-	30.9	3.8	7.4	31.5	1/25.5	---	1/56.5	6.2																			
Peanuts	lb.	Sept.	48	1,349	6	1	1,352	50	48	1,477	1/3	1/1	2/507	2/20																			
Soybeans	bu.	Oct.	1	61	3/	3	58	1	1	107	3/	1/1	2/105	2/2																			
Crude Oil																																	
Linseed oil	lb.	July	138	576	3/	2	572	40	15	988	3/	41	872	226																			
Peanut oil	"	Oct.	24	87	16	2	98	27	35	60	1/3	1/3	75	2/20																			
Soybean oil	"	Oct.	53	395	7	10	386	59	68	705	1/0	1/0	637	2/130																			

1/ Partly estimated.
2/ Estimated.
3/ Less than 500,000 pounds.

Table 3 - Oilcrops: Supplies, Production, Disappearance, and Stocks, 1942

Commodity	Unit	Year begin- ning	Stocks	Pro- duction	Imports	Supplies	Exports		Consumption		Carry- Over
							Commer- cial	Land- Lease	Civilian	Military	
1	2	3	4	5	6	7	8	9	10	11	12
Oilseeds											
Flaxseed	Mil.bu.	July	6.2	42.5	1/12.0	60.7	-	-	45.0	-	15.7
Peanuts	Mil.lb.	Sept.	2/20	2,930	-	2,950	1	-	2,900	-	49
Soybeans	Mil.bu.	Oct.	2/2	211	-	213	1	-	162	-	50
Crude Oil											
Linseed Oil	Mil.lb.	July	226	806	-	1,032	-	135	525	125	247
Peanut Oil	"	Oct.	2/20	460	-	480	35	10	340	20	75
Soybean Oil	"	Oct.	2/13	1,215	-	1,345	35	100	985	70	155

1/ Assumes imports of the 10 million bushels available in Canada and of 2 million bushels from Argentina.
2/ Estimated.

Table 4 - Oilcrops; Supplies, Production, Disappearance, and Stocks, 1943

Commodity	Unit	Year beginning	Estimated stocks	Estimated production	Probable Imports	Supplies	Probable Commercial	Exports: Land lease	Consumption: Civilian	Military	Estimated carry-over
1	2	3	4	5	6	7	8	9	10	11	12
Oilseeds											
Flaxseed.....	mil. bu.	July	15.7	32.6	1/7.0	35.3	-	-	45.0	-	10.3
Peanuts	mil. lb.	Sept.	49	3,375	-	3,424	1	-	3,370	-	53
Soybeans. . . .	mil. bu.	Oct.	50	162	-	212	1	-	162	-	49
Crude Oil											
Linseed oil....	mil. lb.	July	247	806	-	1,053	-	135	500	150	268
Peanut oil . . .	"	Oct.	75	590	-	665	35	10	500	30	90
Soybean oil. . .	"	Oct.	155	1,215	-	1,370	35	100	980	100	155

1/ Assumes imports of 5 million bushels from Canada and 2 million bushels from Argentina, where much larger quantities will be available.

Production Goals, 1943

Table 5 - Oilcrops: Acres, Yield, and Production, 1936-40, 1941, 1942

Commodity	Year Beginning	Acres		Yield				Production					
		1936-40	1941	1942	Unit	1936-40	1941	1942	1936-40	1941	1942		
		3	4	5	6	7	8	9	10	11	12		
1		Thousands				Units				Millions			
Oilseeds													
Flaxseed sowed . .	July	2,145	3,367	4,675	Bu.	6.5	9.4	9.1	14.3	31.5	42.5		
Peanuts harvested, picked and threshed.	Sept.	1,767	1,914	4,173	Lb.	763	772	702	1,349	1,477	2,930		
Soybeans, harvested for beans.	Oct.	3,396	5,855	10,867	Bu.	18	18	19.5	61	107	211		

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Production Goals for 1943: Castor Beans

A domestic castor bean program offers many difficulties. The crop is a new one in most parts of the country and farmers are not familiar with the growing problems involved. The crop must be picked by hand and in many areas where the beans must be grown farmers are not used to such hand labor and with short supplies of labor are unwilling to grow the crop. Castor beans must compete for land and labor with other essential crops. New equipment requiring strategic materials must be supplied to hull the beans. Because of all these factors the Committee believes that castor bean production should be undertaken only as a last resort.

Information upon which to base a recommendation relative to a production program is not final at this time. The Fats and Oils Section of the WPB has informally indicated their opinion that imports of castor beans from Brazil may be reduced below essential minimum requirements, and that other supplies must be provided to meet the deficit. The B.E.W., on the other hand, states that there will be supplies of castor beans from the production program which they are subsidizing in Mexico and Central America ample to meet at least minimum essential needs. The amount of these latter supplies, however, has not been definitely indicated. While reluctant to recommend castor bean production unless absolutely necessary, the Committee recognizes that the Department has a responsibility to insure supplies of vegetable oils essential to war needs. It is recommended, therefore, that a castor bean production program be undertaken by the Department, provided a formal request for domestic production is received from the W.P.B., together with a definite statement of the quantity of beans required from domestic production and full clearance on all priorities necessary to provide the equipment needed to produce the indicated quantity.

Minimum Oil Requirements and Acreage Needed

The W.P.B. estimates an annual absolute minimum essential requirement of castor oil at 37,000,000 pounds, with a highly desirable additional 50,000,000 pounds. The W.P.B. also indicates that because of scarcity of shipping, foreign supplies of castor beans may be sharply reduced except for such quantities as are received from Mexico and Central America. To produce a minimum 37,000,000 pounds of castor oil, with an average extraction of 40 percent, will require 92,500,000 pounds of hulled beans. If the entire supply must be produced in this country, it will require 185,000 acres based on an average yield of 500 pounds per acre.

A castor bean production program can best be developed in parts of Texas, Oklahoma, Kansas, Missouri, Illinois, Indiana, Kentucky, Tennessee, and Arkansas. Available labor and competition from other essential agricultural commodities will determine exact locations. A two-year seed supply for an acreage up to 300,000 acres each year is in prospect from the 8,000 acres grown in 1942.

It is the opinion of the Committee that no substantial acreage of castor beans can be reached without a price support materially above current commercial castor bean prices. Taking into account the per acre return from competitive crops, together with a natural reluctance to grow a new untried crop, it is believed that a price of 5 cents per pound in the hull, based upon 70 percent shelling turnout, will be necessary. This is equivalent to \$160 per long ton for hulled beans to which must be added costs of hulling, sacks, etc. This price compares with the \$50 or less per long ton at port of entry prevailing before the war, and a present price of about \$100 per long ton delivered at New York. Even at the proposed support price it is doubtful whether an acreage large enough to produce all our essential requirements could be attained.

The proposed support price to growers, plus other costs, would result in a delivered price at the New Jersey mills of roughly 10 cents a pound for the beans, compared with a value at ceiling prices for oil of approximately 5 cents. If it were necessary to grow the entire 92,500,000 pounds domestically the program would cost \$4,625,000 plus costs of hulling equipment. If it should be necessary to grow only 10,000,000 pounds the cost would be \$500,000 plus the same additional items.

New hulling equipment must be provided for any enlarged castor bean program. Unless priorities are given for such equipment the program cannot be undertaken. To handle 185,000 acres will require 175 new-hulling machines, 10 being now available. This will require materials as follows:

Steel	- 50,800 pounds	Bronze	- 890 pounds
Cast Iron	- 29,400 "	Welding rod	- 2,140 "
Rubber (abrasive type)	- 8,900 "	Play... ..	- 26,800 " S.
Belting	- 4,450		
175 - 5 H.P. Air Cooled Motors			

P O T A T O E S

An above average crop of potatoes sufficient to meet estimated civilian and military requirements is in prospect for 1942. On the basis of September 1 conditions, a crop of 376,396,000 bushels is indicated this year which represents an increase of about 6 percent over the 1941 production and more than 2 percent above the 10-year (1930-39) average.

In response to sharply advancing prices during the winter and spring months of the 1941-42 season and the announcement of the Department's price-support program on March 4, 1942, growers expanded the acreage planted by 52,000 acres, or 2 percent above that planted in 1941 which was the smallest acreage planted in 50 years. This increase in planted acreage occurred even though the farm price for the two preceding crops averaged 67 cents per bushel, or about 70 percent of parity. Although the acreage indicated for harvest in 1942 represents an increase over 1941, it is 500,000 acres, or 15 percent below the average for the 10-year period, 1930-39. The record yield of 135 bushels per acre indicated in 1942 exceeds the average (1930-39) by 23 bushels per acre and has resulted in the production of a larger than average crop on a sharply reduced acreage.

Yields per acre have been near the record indicated for 1942 during the past few seasons. Greater concentration of production in high yielding areas, the shift away from non-commercial or small farmers to larger commercial farms, more extensive use of good seed, increasing prominence of new high yielding varieties, improved cultural practices, and better than average weather conditions are the factors responsible for these higher yields.

1943 Requirements

Production in 1943 should be greater than in 1942 to provide adequate supplies for food and seed. Based on the rate of consumption as reflected in weekly shipment reports, merchantable stocks on January 1, 1943, will be somewhat less than the 5-year average (1937-41). With an estimated demand or disappearance in 1943 higher than the demand in 1942, provision should be made for a production of approximately 390 million bushels in setting goals and acreage allotments. The distribution among outlets or uses would be as follows:

Potato Requirements by Uses for 1943

<u>Item</u>	<u>Million Bushels</u>
1. Domestic food sold	252
2. Increase in food consumption by armed forces	10
3. Export	2
4. Farm or home consumption	60
5. Feed and waste	25
6. Seed reserve	<u>41</u>
Needed production, 1943	390

This production could be obtained from 3,160,000 acres if yields and abandonment are average. The 5-year (1937-41) average yield was 126.0 bushels. For the past three years yields have been very high and 1942 is a record. However, a near record yield cannot be reasonably expected and some range in yields must be considered. Average weather conditions and yields have been assumed in arriving at the production goals. Average abandonment ranges between 40,000 and 60,000 acres. The following table shows the production resulting from 3,100,000 harvested acres at the respective assumed yields:

Potato Production Resulting from Various Yields on 3,100,000 Acres

<u>Harvested Acres</u>		<u>Bushels per Acre</u>	<u>Production 1,000 Bus.</u>
3,100,000	x	115	356,500
"	x	120	372,000
"	x	126	390,600
"	x	130	403,000
"	x	135	418,500

Potatoes (cont'd)

If a higher than average yield from 3,100,000 harvested acres is obtained, potato supplies would be 20 to 25 million bushels above estimated requirements. This would be expected to exert a depressing influence on prices and large quantities of potatoes might be left unharvested or wasted. On the other hand, a lower than average yield would produce a food supply below requirements. It is necessary to assure a supply of potatoes that will provide adequately for our military forces, for civilians, and for Lend-Lease purposes. This must be done even at the risk of producing more than is needed if producing conditions are unusually favorable.

In asking growers to increase production in 1943, the Department of Agriculture should be fully prepared to give adequate and timely aid to support potato prices. Such a price support program should be announced not later than December. Price support and diversion programs would be greatly strengthened if growers would adopt measures prohibiting low quality and small size potatoes from entering marketing channels in the event of a large crop.

1943 Allotments

The 1943 feasible production, as recommended by the State Committees, is 384,680,000 bushels to be produced on a planted acreage of 2,904,200 acres. This production is approximately 6 million bushels under estimated requirements and is based on a near record yield of 132.4 bushels per planted acre. It is unlikely that estimated requirements will be met unless plantings materially exceed the acreage deemed feasible.

In order to obtain the desired acreage, allotments should exceed the goal. It is recommended that acreage allotments range between 3.2 to 3.3 million acres. Increased production may thus be obtained in areas where acreage expansion is most feasible.

Problems

The most important problem in attaining the desired acreages is the shortage of farm labor and the necessity of using less efficient workers. The Government employment agencies have assisted in recruiting and transporting farm laborers. Local communities have declared business and school holidays and helped growers gather their crops. However, if growers do not have some assurance that adequate supplies of farm laborers will be available in 1943, a reduction in acreage can be expected. There are already labor shortages in certain sections and it is likely that some of the 1942 acreage will not be harvested. With such a problem already existing in 1942, worse conditions can be expected in 1943. The necessity for an active Government program to secure an ample supply of labor cannot be emphasized too strongly.

Shortages of fertilizer may cause rationing to be instituted in 1943. Thus far, the fertilizer question has not been settled. It is assumed that adequate supplies of all commercial fertilizer except nitrogen will be made available. If the Government is forced to ration supplies, potato growers should be allotted a larger quantity than growers of less-essential crops. The over-all supply of chemical nitrogen for 1943 is possibly 80 percent of the total requirements. The saving made by eliminating fertilizer for less-essential crops will help alleviate the shortage for food crops. An adequate supply of other commercial fertilizers should be made available. Growers should be encouraged to increase the nitrogen content of their soil by growing leguminous cover crops.

Another obstacle to production is transportation. Some shifts are being made during the current season from truck to rail. Surveys of the transportation systems are now being made and the results are expected to be available in the near future.

Some producers may have difficulty in obtaining certified seed for planting in 1943. Preliminary reports indicate that acreage entered for certification in 1942 was about 9 percent less than for 1941. The number of acres actually certified in 1941 was about 94,000, from 147,000 acres entered. Only 74 percent of the entered was certified. If 1941 is a fair indication, approximately 86,000 acres will be certified for seed in 1942 from 117,000 acres entered. However, shortages of certified seed may not be a serious handicap to increased production, since other than certified seed may be used and, in fact, is used to the extent of 75 percent of the total planted. The effect of reduced supplies of certified seed will be to reduce yields somewhat. Imports of a substantial quantity of certified seed may be obtained from Canada provided the Canadian supply and requirements situation will permit this release.

Table I

Potatoes: Acreage, Yield, Production and Total Supplies, 5-Year Averages 1936-40 and 1937-41, and by Years 1936 to 1943

Year	Acreage Planted	Acreage Harvested	Yield per Acre Harvested	Production	Imports	Stocks Jan. 1	Total Supplies During the Year
	1	2	3	4	5	6	7
	1,000 acres	1,000 acres	Bushels	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.
1936	3,191	3,063	108.4	331,918	1,266	106,127	439,311
1937	3,227	3,185	124.1	395,294	1,066	85,418	481,778
1938	3,082	3,023	123.8	374,163	764	113,155	488,082
1939	3,056	3,018	120.3	363,159	1,564	103,550	468,273
1940	2,919	2,865	132.0	378,103	1,324	104,390	483,817
1936-40 Av.	3,095	3,031	121.6	368,527	1,197	102,528	472,252
1937-41 Av.	3,015	2,965	126.0	373,700	1,130	103,641	478,471
1941	2,793	2,733	130.9	357,783	934	111,693	470,410
1942/1	2,845	2,798	135.3	378,396	600	104,633	483,629
1943/2	3,160	3,100	126.0	390,600	600	100,000	491,200

1. Preliminary. 1943 estimated by Department committee.

2. Estimates made by the Departmental committee on potato production goals.

Source of data: Publications by the U. S. Dept. Agr.

Cols. 1 and 2: 1936-41 - Prospective Plantings, March 24, 1942, p. 10; 1942, General Crop Reports as of July 1, 1942, p. 23; and General Crop Report as of Sept. 1, 1942, p. 2.

Cols. 3 and 4: 1936-41 - Annual Crop Summary, December 1941, pp. 37 and 39; 1942 from General Crop Report Sept. 1, 1942, p. 1.

Column 5: Compiled by Office of Foreign Agricultural Relations.

Column 6: The Vegetable Situation, January 1942, p. 9.

Column 7: The sum of columns 4, 5 and 6.

Table II

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Potatoes: Exports, Stocks, Disappearance, and Disposition, 5-Year Averages
1936-40 and 1937-41 and by Years 1936 to 1943

Year	Exports	Jan. 1 Stocks and of Year	Domestic Disap-pearance	Fed to Livestock and Waste	Used on Farms for Food	Used for Seed on Farms	Sold for Seed	Starch	Sold for Food	Total Sold
1	2	3	4	5	6	7	8	9	10	
--- 1,000 bushels ---										
1936	1,294	85,418	352,599	19,762	51,771	31,685	9,798	1,834	217,068	228,700
1937	1,822	113,155	366,801	28,654	65,238	32,727	9,224	3,680	255,771	268,675
1938	2,083	103,550	382,449	29,854	64,904	31,299	8,867	2,932	236,307	248,106
1939	2,687	104,390	361,196	25,262	61,053	30,669	10,059	2,699	233,397	246,155
1940	2,593	111,693	369,531	29,913	62,036	26,458	11,489	8,030	240,177	259,696
1936-40 av.	2,096	103,641	366,515	26,693	61,000	30,568	9,667	3,935	236,664	250,266
1937-41 av.	2,368	107,484	368,620	27,182	62,539	29,458	9,737	4,186	240,598	254,521
1941	2,656	104,633	363,121	22,209	59,464	26,136	10,173	5,000/3	234,801	249,974
1942/1	2,000	100,000	381,629	25,000	60,000	27,000	10,000	2,000	257,000	269,000
1943/2	2,000	100,000	389,200	25,000	60,000	31,000	10,000	1,000	262,000	273,000

1. Preliminary.

2. Estimates made by Committee on Potato Production Goals.

3. Estimated from records of AMU, Fruit and Vegetable Branch.

Source of data: Publications of the U. S. Dept. of Agriculture.

Col. 1: Compiled by Office of Foreign Agricultural Relations.

Col. 2: "The Vegetable Situation," Jan. 1942, p. 9.

Col. 3: Column 7 of Table I minus Cols. 1 & 2 of Table II.

Cols. 4, 5, 6, & 10: 1936 from "Disposition of Potatoes," Sept. 1939, p. 64. 1937 to 1939, inclusive, from "Farm Production, Farm Disposition, and Value of Potatoes," July 1940, pages 1, 3, & 6. 1940 and 1941 from "Farm Production, Farm Disposition, and Value of Principal Crops, 1940-41," April 1942, pages 40 and 42.

Col. 7: Computed by assuming 13 bushels planted per acre and subtracting Col. 6 from the total.

Col. 8: Unpublished estimates from the Bureau of Agr. Econ.

Col. 9: Equals Column 10 minus Columns 7 and 8.

Table III

Potatoes: Comparison of 1941 and 1942, Weekly Cumulative Totals of Commercial Carlot Shipments

1942	:	Total	:	1942	:	Total
Season	:	Shipments	:	Season	:	Shipments
	:	to Date	:		:	to Date
	:	1	:		:	2
	:	<u>cars</u>	:		:	<u>cars</u>
May 31	:	18,916	:	May 30	:	18,538
June 7	:	24,232	:	June 6	:	24,377
June 14	:	28,338	:	June 12	:	29,899
June 21	:	32,118	:	June 20	:	35,834
June 28	:	35,807	:	June 27	:	41,138
July 5	:	39,531	:	July 4	:	44,340
July 12	:	44,260	:	July 11	:	46,971
July 19	:	47,250	:	July 18	:	49,541
July 26	:	49,474	:	July 25	:	52,174
Aug. 2	:	50,862	:	Aug. 1	:	53,957
Aug. 9	:	52,505	:	Aug. 8	:	56,233
Aug. 16	:	54,548	:	Aug. 15	:	57,874
Aug. 23	:	56,737	:	Aug. 22	:	60,519
Aug. 30	:	58,665	:	Aug. 29	:	63,272
Sept. 6	:	60,380	:	Sept. 5	:	66,002
Sept. 13	:	63,035	:	Sept. 12	:	68,829

Source of data: Weekly Summary of Carlot Shipments, Agricultural Marketing Administration.

U.S. Dept. Agr.
 AMA-FV-MP
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 9/25/42

Table IV

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Potatoes: Population, Estimated Military Requirements, and Per Capita Consumption
by Civilians, 1936 to 1943

Year	Population : July 1	Total Potatoes : Used for Food : Minus Military	Estimated : Military : Requirements	Per Capita : Civilian Consumption
	1 thousands	2 1,000 bushels	3 1,000 bushels	4 bushels
				5 pounds
1936	128,052	268,839	**	2.10
1937	128,823	321,009	**	2.49
1938	129,823	301,311	**	2.32
1939	130,878	294,450	**	2.25
1940	131,956	302,213	**	2.29
1941/1	131,217	288,265	6,000	2.20
1936-40	129,906	297,564	**	2.29
1937-41	130,539	301,450	**	2.31
1942/1	130,200	307,500	10,500	2.36
1943/1	127,800	298,000	24,000	2.33

**Military requirements not available for other years, and assumed to be unimportant.

/1. Deductions for estimated numbers of men in armed forces respectively: 1941, 2 million, 1942, 3.5 million, 1943, 8 million.

Source of data: Compiled by the U. S. Dept. of Agr., in coll. with Fruit and Vegetable Branch.

Col. 1: Census estimates.

Col. 2: From Table II (sum of Cols. 5 and 9) and minus Col. 3 of this table.

Col. 3: Estimated.

Col. 4: Col. 2 divided by Col. 1.

Col. 5: Col. 4 multiplied by 60 pounds.

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Production Goals,
1943

SWEETPOTATOES

Growing conditions for sweetpotatoes were generally favorable during the 1942 season and yields of 92 bushels per acre are indicated as of September 1. The acreage for harvest at 757,000 acres is about the same as that in 1941 but slightly below that of 1940. Production is estimated at 69,487,000 bushels compared with 63,284,000 bushels in 1941.

The 10-year (1930-39) acreage of sweetpotatoes for harvest averaged 882,000 acres, yields averaged 83 bushels per acre, and U. S. production 73,208,000 bushels. There is no indication of an upward trend in yields per acre of sweetpotatoes.

After publication of the 1939 census reductions for the subsequent years were made of about 85,000 acres of about 8 million bushels in production and 4,500,000 bushels in the amount sold. For these reasons, it is not possible to compare current acreage and production data with that of the 1930-39 average as the data for all of these years have not been revised.

Disposition

During the 5-year period (1936-40) it is estimated that approximately 26 million bushels of sweetpotatoes were sold or offered for sale, 6 million bushels saved for seed, and the remainder largely used as food on the farm and some was fed to livestock, lost, or wasted.

Suggested Goal for 1943

The 1943 goal of 800,000 acres for harvest should produce about 66,000,000 bushels with (1936-40) average yields of about 83 bushels per acre. This is slightly below the 1941 production of 69 million bushels from 757,000 acres. During the 1941 marketing season 550,000 bushels were purchased by the Agricultural Marketing Administration. Growers' representatives are requesting purchases from the 1942 crop. Prices are generally low during harvest.

There are no exports of sweetpotatoes and no Lend-Lease requirements for them. Wooden containers are high in price but can be obtained. Paper bags holding 50 pounds each can be substituted for wooden containers. Such paper bags cost about one-third the price of wooden containers.

The 1943 goal may not be attained as there is a tendency to increase cotton acreage and decrease sweetpotato acreage when cotton prices are high. Transportation may be a problem. About 400,000 bushels are expected to be used for dehydration. Labor, seed, and machinery should not be a problem.

SUGGESTED GOALS for 1943; Irish and Sweetpotatoes 1/

(February 5, 1943)

State	Irish Potatoes				Sweet Potatoes		
	Suggested	Estimated	planted	acres	Suggested	Estimated	acres
	planted	acres			planted	for harvest	
	acres	1942	1941		acres	1942	1941
	1943 2/				1943 3/		
	1,000	1,000	1,000		1,000	1,000	1,000
	acres	acres	acres		acres	acres	acres
Ariz.	2.5	3.0	2.5				
Calif.	77.0	84.0	71.0		13 20	12	12
Colo.	89.0	85.0	71.0				
Idaho	141.0	144.0	134.0				
Mont.	18.0		15.0				
Nebr.	2.4	3.0	2.3				
New Mexico	5.0	6.0	4.5				
Oregon	42.0	44.0	37.0				
Utah	13.0	15.0	12.2				
Wash.	45.0	47.0	41.0				
Wyo.	20.0	21.0	15.0				
Total	454.9	405.5	392.1		13	12	12
Ill.	40.0		37.0		3 5	3	3
Ind.	55.0		52.0		3	3	3
Iowa	62.0		58.0		2 3	2	2
Kansas	29.0	30.0	26.0		3 5	3	3
Mich.	231.0		188.0				
Minn.	256.0		233.0				
Mo.	47.0		40.0		10 15	9	8
Nebr.	86.0		76.0				
N. Dak.	168.0	167.0	155.0				
Ohio	106.0		89.0				
S. Dak.	35.0		33.0				
Wisc.	194.0		160.0				
Total	1309.0	1147.0	1146.0		21	20	19
Conn.	18.0	21.0	16.2				
Del.	4.1		3.9		3 4	3	3
Maine	179.0	185.0	165.0				
Md.	24.0		20.0		10 12	9	8
Mass.	23.0	23.0	19.0				
N. H.	9.0	10.0	7.1				
N. J.	62.0	70.0	60.0		17 20	16	15
N. Y.	216.0	250.0	191.0				
Pa.	184.0	211.0	158.0				
R. I.	5.0	6.0	5.0				
Vt.	14.0	16.0	12.0				
W. Va.	36.0		36.0				
Total	771.1	693.2	673.8		30	28	26
Ala.	53.0		52.0		98 100	94	94
Ark.	46.0		45.0		26 35	25	23
Fla.	34.0		30.0		20 25	19	18
Ga.	26.0		28.0		108 140	105	105
Ky.	51.0		50.0		17 25	16	16
La.	47.0		46.0		68 115	82	85
Miss.	26.0		27.0		74 95	73	68
N. C.	89.0		83.0		82 90	72	80
Okla.	36.0		34.0		14 18	13	12
S. C.	29.0		28.0		63 75	62	55
Tenn.	45.0		43.0		50 60	44	53
Tex.	60.0		60.0		62 95	60	60
Va.	83.0		73.0		34 40	32	33
Total	625.0		599.0		736	697	702
U.S. Total	3,160.0	2,814.7	2,793.4		800 1000	757	759

1/ Total acreage. 2/ All allotments may vary somewhat owing to method of calculation. 3/ Not including estimates of sweetpotatoes for new developments in starch manufacture.

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SWEET POTATOES: HARVESTED ACREAGE, YIELD PER ACRE,
PRODUCTION, AND DISPOSITION, 1936-1943, WITH 1936-40 AND 1940-41 AVERAGES

Year	Harvested Acreage	Yield Per Acre	Fed to					Saved on Farm for Seed	Total Sold ^{1/2}
			1	2	3	4	5	6	7
	1,000 Acres	Bushels	1,000 Bu.	1,000 Bu.	1,000 Bu.	1,000 Bu.	1,000 Bu.	1,000 Bu.	1,000 Bu.
1936	822	78.0	64,144	5,393	27,974	6,163	24,614		
1937	840	89.3	75,053	6,705	32,577	6,454	29,317		
1938	883	86.8	76,447	7,308	33,562	6,294	29,483		
1939	862	84.3	72,679	6,611	32,410	5,821	27,837		
1940 ^{1/4}	772	80.3	53,811	4,369	24,737	5,571	19,134		
1941 ^{1/4}	759	83.4	63,284	5,293	28,442	5,690	23,859		
1942 ^{1/4}	757	51.8	65,487	5,767	31,547	6,671	25,502		
1943 ^{1/2}	800	83.0	65,400	5,511	30,146	6,374	24,369		
1936-40 av.	836	83.7	68,467	6,077	30,252	6,061	26,077		
1940-41 av.	766	81.8	58,548	4,831	26,590	5,630	21,497		

¹ Acreage is "For Harvest" as of July 1. Yield and Production are as indicated in General Crop Report as of Sept. 1, 1942. Dispositions are computed on ratios of 1940-41 averages.

² Includes a small quantity sold for seed--estimated at less than 1/2 of 1 percent of total production.

³ Goals - disposition computed on ratios of 1940-41 averages.

⁴ Revised estimates.

Source: Cols 1-2: 1936-40, Agricultural Statistics, 1941; 1941-42, Sept. 1, 1942 General Crop Report.

Cols 3-7: AMA Reports on Farm Production, Disposition, and Value; Averages and 1942 and 1943 computed as indicated.

PRODUCTION GOALS FOR MEAT ANIMALS FOR 1943

Summary

The suggested 1943 production goal for meat is a total slaughter of 30.4 million cattle and calves, 24.1 million sheep and lambs, and 97 million hogs. A total slaughter of these numbers of animals seems to be about the highest production of meat feasible in 1943 for each class of livestock. The slaughter of 97 million hogs in 1943 and a somewhat larger number in 1944 will involve spring and fall pig crops 10 percent larger in 1943 and 1944 than those of 1942. Achievement of the cattle and sheep slaughter goals probably will involve small reductions from the peak numbers of 1942, but it will not jeopardize a high level of production and slaughter in 1943 and years immediately following.

The estimated yield from these numbers of animals slaughtered would be about 25 billion pounds of meat and 3.2 billion pounds of lard. Of the total production of meat, about 10.9 billion pounds would be beef and veal, about 9.9 billion pounds would be lamb and mutton, and about 13.1 billion pounds would be pork.

The production goals for meat are slightly below the estimated total minimum requirements for meat for all purposes that must be met from 1943 production. But in view of the probable need for continued high production levels in 1944 and in view of the production difficulties that farmers will encounter next year, it does not seem feasible now to recommend larger goals for slaughter of meat animals in 1943. The yield of lard from 97 million hogs will exceed the lard requirements in 1943 by a good margin.

Requirements For 1943

The total minimum requirements for all purposes in 1943 for beef and veal, lamb and mutton, and pork combined are 26,164 million pounds. These requirements are 3,215 million pounds, or 11 percent, larger than the supply expected to be available this year. Military and lend-lease requirements are 1,328 million pounds (75 percent) and 612 million pounds (42 percent) more, respectively, than in 1942. The total requirements for lard are 2,975 million pounds in 1943 compared with an expected supply of 2,863 million pounds in 1942. Of the total requirements in 1943, 1,020 million pounds will be needed for lend-lease. Military requirements for lard are negligible.

Adequacy of Goals and Requirements

If attained, the goals which are slightly below the minimum requirements will provide approximately 137 pounds of meat and 14 pounds of lard per capita for civilians. This rate of consumption would be about 5 pounds of meat and 2 pounds of lard more per capita than the average annual rate of consumption from 1936 to 1940, but about 11 pounds of meat and about 1 pound of lard less per capita than was consumed in 1941. Civilian consumers, however, probably would buy considerably more meat at ceiling prices than is allocated to them in the goal, and military and lend-lease needs are more likely to be greater than less. Hence, some form of rationing of civilian buyers probably will be necessary in order to get through the months ahead with these minimum supplies of meat.

Prospective Problems and Recommendations

The prospective problems in attaining the goals for each class of livestock and recommendations for alleviating or overcoming them are set forth in detail in the separate reports on hogs, beef cattle, sheep, and wool. Outstanding among the problems that confront farmers and ranchers in meeting the goals for hogs, cattle and sheep are shortages of workers. Inadequate processing facilities will be a problem in the marketing and slaughter of hogs during the peak season of slaughter in December and January, 1942-43, and even more critical in the same season in 1943-44. Transportation difficulties now emerging will become increasingly serious, especially during the period of heavy movement of cattle and sheep from ranges in October and November. Reduced trucking facilities will hinder the movement of livestock and feed, and the general operation of farms and ranches. The supply of railroad stock cars probably

will be adequate, if not diverted to other uses, but a general congestion in rail traffic may develop.

The shortage of feed grains, although less critical now than seemed likely before the September Crop Report, remains a definitely limiting factor in a sustained high level of livestock production. Larger than present acreages of feed grains and continuance of the record yields of recent years, or feeding larger quantities of wheat, will be necessary for continuing 1943 or higher levels of livestock production in 1944 and the years immediately following. It will become increasingly important, therefore, that every possible effort be made to obtain the most effective utilization of available feed supplies by allocating them to the classes of livestock and systems of management that convert feed most efficiently into food products insofar as such allocation is consistent with the food-for-freedom program as a whole. Every possible effort also should be made to avoid a reduction in production efficiency due to insufficient care, overcrowding, and disease.

The shortage of workers probably will hinder the production of sheep and is more than that of cattle or hogs. It will become an increasingly serious problem, however, with all classes of livestock and all farm operations. Insofar as it may be consistent with man power policy, more attention should be given to the special skills necessary for handling livestock in the programs for recruiting, training, and placement of workers and in the administration of the Selective Service System.

All transportation facilities should be utilized as efficiently as possible in the movement of livestock and feed. The use of trucks can be economized by more efficient pick-up service. Cross hauling and duplication of service must be reduced to a minimum. Trucks must be loaded to capacity. Available rail transportation should be used in place of trucks for long hauls and for all feasible short hauls.

Table I.- Goals for 1943: Desired domestic supplies, foreign trade, carry-over, production and goals for 1943 1/

Table 11.- Goals for 1943: Numbers, yields, disappearance, foreign trade, and stocks, 1936-40, 1941, and 1942 1/

MEAT ANIMALS 2/

Commodity	Animals			Yield			Production			Stocks, first of year			Imports		
	1936-40	1941	1942	1936-40	1941	1942	1936-40	1941	1942	1936-40	1941	1942	1936-40	1941	1942
Column	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	1,000 head	1,000 head	1,000 head	Pounds	Pounds	Pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
Beef	15,245	16,453	13,300	465	492	497	7,092	8,101	9,100	99	107	135	155	302	150
Veal	9,605	9,278	9,500	106	111	112	1,020	1,029	1,060	---	---	---	---	---	---
Beef and veal	24,850	25,736	27,800	327	355	365	8,112	9,130	10,160	99	107	135	155	302	150
Lamb and mutton	21,902	22,345	24,100	40	41	41	877	925	988	5	5	8	---	---	---
Pork	63,196	71,403	83,000	129	132	133	8,161	9,451	11,039	458	656	469	---	12	---
All meats	---	---	---	---	---	---	17,150	19,506	22,187	562	768	612	155	314	150
Lard	63,196	71,403	83,000	29	32	32	1,820	2,282	2,676	104	294	187	---	---	---

Disappearance

Commodity	Total supply			1936-40			1941			1942			Exports		
	1936-40	1941	1942	Domestic	Exports	Carry-over	Domestic	Exports	Carry-over	Domestic	Exports	Carry-over	Domestic	Exports	Carry-over
Column	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
Beef	7,346	8,510	9,385	7,247	---	99	8,183	192	135	8,320	870	30	30	135	---
Veal	1,020	1,029	1,060	1,020	---	---	1,029	---	---	980	80	---	---	---	---
Beef and veal	8,366	9,539	10,445	8,267	---	99	9,212	192	135	9,300	950	30	30	135	---
Lamb and mutton	882	930	996	875	---	7	919	3	8	941	47	3	---	5	---
Pork	8,619	10,119	11,508	7,994	101	524	9,003	647	469	7,509	770	69	2,560	600	---
All meats	17,867	20,583	22,949	17,136	101	630	19,134	842	612	17,750	1,767	102	2,590	740	---
Lard	1,924	2,576	2,863	1,558	215	151	1,998	391	187	1,607	5	150	901	200	---

1/ Year beginning Jan. Preliminary estimates for 1942. 2/ Dressed weight.

1943 GOALS FOR HOG AND PORK PRODUCTION

SUMMARY

The suggested 1943 goal for hogs calls for a total United States pig crop of 116 million head--a 10 percent increase in both the spring and fall pig crops over those of 1942. The 10 percent increase in the 1943 spring pig crop is only a little more than the average increase indicated as feasible in the State reports on agriculture's wartime production capacity, but the recommended increase in the fall crop is substantially greater than the average increase of 2 percent indicated as feasible in some of these reports. However, one of the major problems limiting further increases in hog production during 1943, namely feed shortages, now appears to be less critical than seemed likely before the September Crop Report. It is recognized that other factors such as labor shortages and lower production efficiency will make difficult further increases, but a production of this magnitude is necessary if requirements for hog products in 1943 and 1944 are to be met.

Supplies of hogs for slaughter in 1943 are already largely determined. An increase in the 1943 spring pig crop would contribute to slaughter in the last quarter of the year, but it would not help to meet requirements during the summer of 1943 when supplies probably again will be seasonally short. Hence, in order to meet as nearly as possible the year's total requirements for pork, it is recommended that hogs be fed to an average weight about 10 pounds heavier than the record heavy weights of the past 2 years.

Probably the one thing most needed to encourage the recommended increases in production--increased farrowings and heavier weights--in 1943 is definite assurance of a continued high level of hog prices and premiums for heavy hogs. Some form of special assistance in obtaining hog production equipment and veterinary service also should be considered. Anything that can be done should be done to overcome the problem of decreasing numbers of experienced farm workers.

Production and Marketing of Hogs During 1942

Hog producers this year are raising the largest pig crop on record--106.5 million head. This is one-third more than the average number of pigs raised before the 1934 drought. The 1942 spring crop of 62 million head is 25 percent greater than that of 1941, and the fall crop, preliminarily estimated at 43.5 million head will be about 22 percent greater than last year's fall crop. Production is up sharply over last year in nearly all States, although the recovery in the Western Corn Belt since 1936 has lagged behind the Eastern Corn Belt and States outside the North Central Region.

The 1942 goal for total hogs slaughtered, based largely upon the 1941 pig crop and the prospective pig crop of 1942, was 83 million head. This is a little over 5 million head greater than the previous record slaughter of 77.6 million head in 1940. Even though the 1942 slaughter goal probably will be reached, shortages of pork have developed in many areas since mid-summer. Because of large lend-lease and military purchases and the exceptionally strong wartime demand of civilian consumers, the total demand for pork has been greater during the past summer than the total amount of pork that has been available for distribution at ceiling prices. The large seasonal increase in hogs to be marketed during the coming fall and winter will help to ease this meat shortage situation. But total demands for meats are expected to continue large or increase further, and a repetition of this situation may be expected again in 1943.

Requirements for Pork and Lard in 1943

Total requirements for hog products in the calendar year 1943 are currently estimated at nearly 13.3 billion pounds of pork and 2.8 billion pounds of lard. As shown in the accompanying table, these estimates include about 3.2 billion pounds

of pork for lend-lease and 1.3 billion pounds for military needs. Both of these estimates are subject to frequent and substantial revision. They are more likely to be raised than lowered during coming months and they are expected to be substantially greater in 1944 than in 1943. Supplies of pork for civilian consumption needed to meet dietary standards and other considerations have been estimated at a little over 8.8 billion pounds, equivalent to a per capita consumption of about 70 pounds per annum. A consumption of this size would be somewhat larger than the average of recent years, but it probably is not high relative to the wartime needs of the civilian population. Moreover, it probably is 10 to 12 pounds less per person than civilians would like to buy at ceiling prices.

Total requirements for lard in 1943 are estimated at roughly 1.2 billion pounds for lend-lease and commercial exports and 1.6 billion pounds for civilians. The estimate of civilian needs is a little larger than the 1936-40 average consumption. However, it is much smaller than the record large consumption of 1940 and 1941 and it appears to be substantially smaller than the amount consumers will want to buy at ceiling prices. It is also less than the amount which probably will be available for civilian consumption. Total exports of lard in the 5 years, 1936-40, averaged less than 200 million pounds annually, or only about 15 percent as great as the total amount expected to be exported under lend-lease and commercially in 1943. Military requirements for lard are negligible. Both the Army and Navy depend largely upon vegetable compounds for shortening and other cooking purposes. The estimated requirements for pork and lard in 1943 compared with other recent years are shown in the accompanying table.

Estimated total requirements of pork and lard for 1943,
compared with distribution in specified years

Item	Unit	Pork			Lard		
		1936-40	1941	1943	1936-40	1941	1943
		average	requirements	requirements	average	requirements	requirements
Commercial exports and shipments	Mil. lb.	148	75	80	186	75	180
Lend-lease	" "	---	572	3,200	---	326	1,020
Military	" "	2/	280	1,260	2/	2	5
Civilian consumption	" "	7,978	8,743	8,841	1,561	1,990	1,600
Total	" "	8,126	9,650	13,351	1,767	2,393	2,775
Per capita civilian consumption	Lb.	61.3	66.6	70.0	12.1	15.0	12.5

1/ Preliminary, subject to revision.

2/ Negligible.

Supplies of Pork and Lard and Hog Slaughter Needed
to Meet 1943 Requirements

The number of hogs available for market and farm slaughter in 1943 already is largely determined. But an increase in next year's spring pig crop would contribute to increased slaughter supplies during the last quarter of 1943 and to meeting the even larger requirements expected in 1944.

Storage holdings of pork on hand at the beginning of 1943 are tentatively estimated at 600 million pounds. Little or no pork is expected to be imported during the year. Production of pork in 1943, therefore, would have to total nearly 13.3 billion pounds if the estimated total requirements are to be met and a carry-over of about 600 million pounds provided at the end of the year. Assuming an average yield of dressed pork (fresh basis) of about 133 pounds per hog, the same as is estimated for 1942, a total hog slaughter in 1943 of about 100 million hogs would be required. But average yields of pork probably can be raised about 3 pounds per hog by feeding hogs to heavier weights and a total slaughter of only about 97 million head would be required.

Assuming that storage holdings of lard will not change materially from the beginning to the end of the year and that imports will be negligible, the supply of lard needed to meet total requirements in 1943 will be nearly 2.8 billion pounds, roughly 10 million pounds more than the average 1936-40 production. Assuming average yields of lard of about 54 pounds per hog, a total slaughter of about 82 million hogs would be needed to meet these requirements. This is 15 million head less than the total slaughter needed to meet the pork requirements in 1943, but it appears that the estimated civilian requirements for lard are too low.

Recommended Goals for Production and Marketings

As indicated above, total requirements for pork and lard in 1943 and 1944 cannot be met without a further increase in hog production. There are only two ways of increasing production: (1) Raising more hogs for market, and (2) feeding to heavier weights. Although hog production appears to be approaching the maximum level that can be expected, some further expansion in both these directions appears feasible. Hence, it is recommended that both the spring and fall pig crops of 1943 be increased by 10 percent over those of 1942, and that weights of hogs slaughtered in 1943 and 1944 be about 10 pounds heavier per animal than is estimated for 1942.

Assuming that the final outcome of the 1942 pig crop may be about as now indicated and that the 10 percent increase in next year's pig crop will be obtained, hog slaughter in 1943 could reach a total of approximately 97 million head. And with no further increase in the pig crop of the following year, a total slaughter of 103 million head in 1944 might be reached. The basis for these calculations, taking into account death losses and other factors affecting marketings, are shown in the accompanying table.

Balance sheet of hog numbers 1939-45

Item	Estimated or recommended						
	1939	1940	1941	1942	1943	1944	1945
	Mil.	Mil.	Mil.	Mil.	Mil.	Mil.	Mil.
On farms January 1	:	:	:	:	:	:	:
Fall crop	25.1	30.0	26.3	31.0	39.0	43.0	43.0
Spring crop	15.4	21.7	19.4	18.7	22.0	25.5	25.5
Breeding	9.5	9.4	8.5	10.8	12.0	12.0	12.0
Total	50.0	61.1	54.2	60.5	73.0	80.5	80.5
Pig crop	:	:	:	:	:	:	:
Spring	53.2	49.5	49.4	62.0	68.2	63.2	
Fall	33.7	30.3	35.6	43.5	47.8	47.8	
Total	86.9	79.8	85.0	105.5	116.0	116.0	
Total supply	136.9	140.9	139.2	166.0	189.0	196.5	
Disappearance	:	:	:	:	:	:	:
Federally inspected slaughter	41.4	50.4	46.5	56.5	68.0	72.5	
Wholesale slaughter	7.1	8.9	8.1	9.0	10.5	11.5	
Retail	4.1	4.2	4.0	4.2	4.3	4.5	
Farm	14.0	14.1	12.8	13.3	14.2	14.5	
Total	66.6	77.6	71.4	83.0	97.0	103.0	
Other disappearance	9.2	9.1	7.3	10.0	11.5	13.0	
Total disappearance	75.8	86.7	78.7	93.0	108.5	116.0	
On farms end of year	61.1	54.2	60.5	73.0	80.5	80.5	

The average live weight of hogs slaughtered under Federal inspection during 1941 was 241 pounds, 6 pounds heavier than in any other year of record. Despite this high average weight, a considerable number of very light weight hogs (under 220 pounds)

are known to have been marketed. At the same time, many Corn Belt farmers follow the practice of fattening hogs to 270 pounds or over before marketing. Animal husbandmen point out that at the current high level of hog numbers, increases in pork and lard production, within limits, can be obtained more easily by feeding to heavier weights than by raising a correspondingly larger number of hogs. Thus it appears that an increase of about 10 pounds in the average live weight of hogs marketed during 1943 and 1944 is both feasible and desirable. Average yields and the resulting total production of pork and lard in 1943 will depend to a large extent upon the disposition of the fat cuts. Lend-lease requirements indicate that a large number of fatbacks will be needed. This will tend to hold pork yield to a high figure at the expense of lard yields. Hence, it is estimated that a 10 pound increase in average live weight would be reflected in an approximately 3-pound increase in the average yield of pork per hog and a 2-pound increase in the yield of lard. Estimates of the pork and lard production based upon the recommended slaughter and yield figures are shown in the following table:

Estimated production of pork and lard, 1941-44

Item	Unit	Estimated		Goals	
		1941	1942	1943	1944
Number slaughtered					
Federal inspection	Mil. head	46.5	56.5	68.0	73.0
Non-inspection	" "	24.9	26.5	29.0	31.0
Total	" "	71.4	83.0	97.0	104.0
Average yield of pork					
Federal inspection	Lb.	136	137	140	140
Non-inspection	"	125	125	125	125
Total	"	132	133	136	136
Average yield of lard					
Federal inspection	"	33	33	35	35
Non-inspection	"	30	30	30	30
Total	"	32	32	34	34
Production of pork					
Federal inspection	Mil. lb.	6,324	7,740	9,520	10,220
Non-inspection	" "	3,112	3,312	3,625	3,875
Total	" "	9,436	11,052	13,145	14,095
Production of lard					
Federal inspection	" "	1,534	1,864	2,380	2,555
Non-inspection	" "	747	795	870	930
Total	" "	2,281	2,659	3,250	3,485

Distribution of Recommended Increase in the 1943 Pig Crop

The recommended increase in the 1943 spring and fall pig crops does not contemplate a flat percentage increase of 10 percent in all regions. Several States, particularly in the Western Corn Belt, have indicated that increases greater than 10 percent are feasible. Other States suggested reductions in the 1943 fall crop. A survey of the meat packing industry indicates that the maximum capacity of processing facilities at Corn Belt markets will be nearly reached this winter when marketings are at their peak. Processing facilities outside the Corn Belt are sufficient to handle a much larger number of hogs than are now being slaughtered, however. These and other considerations will be taken into account in distributing the recommended 1943 pig crop by States.

An exact estimate of the adequacy of processing and transportation facilities during the fall and winter of 1943-44 is difficult to make at this time. If experience

During the next few months in the marketing of the 1942 spring pig crop should indicate that a spring pig crop in 1943 of 10 percent more than in 1942 would create a very difficult marketing situation next fall, a recommendation could be made in November or December (1942) that late breedings be curtailed or a part of the gilts already bred be sent to market for slaughter. In the meantime, it seems desirable in view of the large requirements for pork to ask for a full 10 percent increase in next year's spring pig crop.

Considerations Involved in Reaching the 1943 Goal for Hog Production

With the 1943 corn crop now estimated at slightly more than 3 billion bushels, the restricting effect of short feed supplies upon livestock production in 1943 is less critical than seemed likely before the September Crop Report. The carry-over of corn on October 1, 1943, also may be several hundred million bushels greater than previously had been indicated, and this would help to offset any decrease in next year's corn crop caused by growing conditions less favorable than in recent years.

The effect of this year's large corn crop upon corn prices should contribute to a continued favorable relationship between prices of hogs and prices of feed. But a large run of hogs this fall and winter may severely depress hog prices. As such a decline would most likely occur at a time when breeding operations are under way and plans for 1943 production are being formulated, it seems highly desirable that a definite price support policy be announced by the Department of Agriculture as early as possible for hogs to be marketed from the 1943 spring and fall pig crops. In the formulation of a price support policy, consideration should be given to offering premiums for heavy hogs and for spreading hog marketings more evenly than usual over the entire marketing period.

One of the most important factors that will tend to prevent further expansion of hog production as recommended in this report is the increasing shortage of farm workers. A large part of agriculture's man power is being taken into the armed forces or is finding work in other war industries. Hence, the need for increased agricultural production in practically all lines is being thrown upon a steadily decreasing number of experienced farm workers.

Other retarding factors include the physical limitations of available buildings and other production equipment, and particularly in the case of hogs, the possibility of greater than usual mortality. Some form of special assistance in obtaining hog production equipment and veterinary service should be given careful consideration.

The announcement of the 1943 hog production goals should be in terms of numbers of sows to be bred for spring farrowing and for fall farrowing. It should also include helpful suggestions on within-season distribution of dates of farrowings and of marketings.

PRODUCTION GOALS FOR BEEF AND VEAL FOR 1943

Summary

The suggested 1943 production goal for beef and veal is a total slaughter of 30.4 million cattle and calves. The estimated yield of beef and veal from this number of cattle and calves is 10,874 million pounds. A total slaughter of 30.4 million cattle and calves appears to be about the highest production of beef and veal feasible in 1943. Of the total, 20.1 million would be cattle and 10.3 million would be calves. This slaughter would involve a small reduction from the peak numbers of 1942, but it would not jeopardize a high level of production and slaughter in 1944 and years immediately following.

The production goal is slightly below the estimated total minimum requirements for beef and veal for all purposes that must be met from 1943 production. But in view of the probable need for continued high production in 1944, it does not seem feasible to recommend a larger goal for the slaughter of cattle and calves in 1943. If 20.1 million cattle are slaughtered, a total production of beef of 9,741 million pounds probably would be obtained. A slaughter of 10.3 million calves would yield about 1,133 million pounds of veal.

Requirements For 1943

The total minimum requirements for beef and veal for all purposes in 1943 are estimated to be 11,219 million pounds. These requirements are 374 million pounds, or 3.5 percent, larger than the supply expected to be available in 1942. Military and lend-lease requirements are 793 million pounds and 445 million pounds more, respectively than in 1942. About 10,984 million pounds of the total requirements would have to be met from 1943 production as stocks at the beginning of the year and imports probably will not exceed 235 million pounds.

Adequacy of Requirements and Goals

The minimum requirements for civilian consumption of beef and veal in 1943 were scaled down slightly below civilian consumption in 1941 and 459 million pounds below the estimated consumption in 1942. But because more men are now in the armed forces and the production goal suggested for 1943 is only slightly less than the total requirements that must be met from 1943 slaughter, the per capita consumption by the civilian population can be about 6 pounds above the average annual per capita consumption from 1936 to 1940, and only slightly less than in 1941. However, civilian consumers probably would buy substantially more beef and veal at ceiling prices than is allocated to them in the goal, and military and lend-lease needs are more likely to be greater than less.

Prospective Problems in Attaining Goals

In some western range areas, the numbers of cattle are too large in relation to normal range forage and feed resources to produce the maximum output of beef. In the Corn Belt, the acreage of hay and pasture will be further reduced and beef cattle will face increasing competition from increasing numbers of dairy cattle and other livestock. Price ceilings on beef will discourage the feeding of long-fed, highly-finished cattle, cause considerable adjustment in cattle feeding operations, and may reduce the average weight of cattle marketed for slaughter. These changes in feeding operations may be reflected back into the range country and affect the handling of cattle usually marketed as feeders.

Labor shortages may become acute. Transportation difficulties now emerging will become increasingly serious. Reduced trucking facilities will handicap the movement of cattle and feed, and the general operation of ranches and farms. The supply of railroad stock cars probably will be adequate if not diverted to other uses, but a general congestion in rail traffic may develop. Processing facilities for cattle probably will be adequate.

Recommendations

To facilitate the achievement of the goals, certain lines of action appear to be needed:

1. A goal in terms of number of head marketed and slaughtered seems to be the most satisfactory summary figure, but a statement of the implications of the goal for different production areas, in terms of classes and ages marketed, numbers and types put into feed lots, and market weights and degree of finish desirable, should accompany the announcement of the goal to avoid the misunderstandings and misinterpretations that existed regarding the 1942 beef cattle goals. The important place that beef cattle must fill in meeting the mounting demands for meat both for the armed forces and for furnishing a high-energy diet for civilian war workers should be emphasized.
2. The essential nature of motor transport in range and ranch operations and long distances of necessary travel need to be taken into account in allocating gasoline, tires, and repairs. Everywhere all transportation facilities should be utilized as efficiently as possible even though they are currently adequate. The use of trucks can be economized by more efficient pick-up service. Cross-hauling and duplication of service should be reduced to a minimum. Trucks should be loaded to capacity. Available rail transportation should be used in place of trucks for moving livestock long distances wherever feasible.
3. Encourage giving more attention to the special skills necessary in handling cattle on ranches and farms in the programs for the recruitment, training, and placement of workers and in the administration of the Selective Service System.
4. In meeting the war needs for beef, it is important that stockmen endeavor to market cattle at the time when they are in optimum condition for sale. There is some evidence that cattle are frequently held on the range until after they have reached their maximum weight or have actually lost weight before gathering and shipping. Moreover, earlier marketing would serve to avoid in part the peak load on transportation facilities in October and November.

The Situation in 1942

Supplies and Utilization

Although the total supplies of beef and veal in 1942 are expected to approach the slaughter goal set in January and to be 25 percent above the average annual supplies during the 5-year period from 1936 to 1940, they have been insufficient to meet the progressively increasing military, lend-lease, and civilian demands. Commercial exports and shipments for lend-lease this year--estimated at 30 million pounds for each--will not be as large as the commercial exports of 192 million pounds in 1941. Military requirements in 1942 are expected to be 950 million pounds compared with 245 million pounds in 1941. Civilian consumption probably will increase from 9,267 million pounds in 1936-40 and 9,212 million pounds in 1941 to 9,300 million pounds in 1942, notwithstanding the shift of a large number of men into the armed forces. But effective civilian demand for beef and veal at ceiling prices is expected to be considerably larger than the available supply during the last half of 1942. Imports of beef in 1942 probably will be about the same as in 1936-40, but only half those in 1941. About 135 million pounds of beef probably will be carried over into 1943. This will be somewhat larger than usual but is proportional to current rates of slaughter. The stocks of beef are largely beef in the process of curing.

Problems Encountered in 1942

On the whole, wartime production problems have not greatly affected the total production of cattle and calves in 1942. Range forage production has been good in most areas, and at the present time there are only a few places where significant feed shortages are critical. The western range States have had several seasons of above normal precipitation. This has resulted in more forage, stock water, and a generally optimistic outlook by producers. But even though the present combination of range forage and supplemental feed supplies may carry the cattle now in the West, the numbers in parts of the region are too large for maximum production under normal supplies of range and feed.

In the Corn Belt, competition of corn and soybeans with hay and pasture has considerably reduced the acreages of hay and pasture. The acreage of these crops was reduced 7.5 million acres in the North Central States in 1942, compared with 1941. Moreover, beef cattle have faced increased competition for hay and pasture from increasing numbers of dairy cattle and other livestock in some parts of the North Central States.

Labor shortages, especially for haying and for handling range cattle, have developed in the West. Transportation difficulties are emerging. But combined rail and truck transportation facilities have been and should be adequate for moving cattle to market in 1942. No shortages in processing facilities for cattle have been encountered. Supplies of machinery and repair parts are reported generally sufficient. Supplies of credit are satisfactory.

Requirements for 1943

The total amount of beef and veal required in 1943 for all purposes has been estimated at 11,219 million pounds. The composition and distribution of this total requirement is as follows:

Item	Domestic		Exports		Carry-	Total
	Civilian	Military	Com-	Lend	over	
	: Million : pounds	: Million : pounds	: Million : pounds	: Million : pounds	: Million : pounds	
Beef	7,829	1,558	25	475	135	10,022
Veal	1,012	185	---	---	---	1,197
Beef and veal	8,841	1,743	25	475	135	11,219

These are minimum requirements. The carry-over, although somewhat larger than usual, is only proportional to the rate of slaughter. The military and lend-lease needs are more likely to be greater than less. Civilian demand will be very active, with civilian consumers willing to take substantially more beef and veal at ceiling prices.

The per capita requirements for the civilian population in 1943, compared with the per capita consumption by civilians in 1936-40 and in 1941 are as follows:

Item	Requirements	Consumption	
	1943 1/	1941	1936-40
	: Pounds	: Pounds	: Pounds
Beef	61.4	63.4	55.6
Veal	7.9	7.4	7.9
Beef and veal	70.3	70.8	63.5

1/ A civilian population of 126.3 million was assumed in these computations.

Beef and veal requirements make up about 42 percent of the total meat requirements. They are vital items, therefore, in the food arsenal. With a generally more critical meat supply situation in prospect, it is clear that as many cattle and calves must be slaughtered in 1943 as can be sent to market without jeopardizing the "plant" essential for a high level of production and slaughter in 1944 and the years immediately following.

Supplies for 1943

Prospective Stocks and Imports, and Production Desired

Stocks of beef that will be carried over from 1942 are estimated at 135 million pounds. One hundred million pounds of beef probably will be imported in 1943. Production in 1943, therefore, would have to be 9,787 million pounds in order to meet the requirements for domestic consumption, for exports, and for carry-over. Assuming an average dressed weight of 484 pounds per animal, 20.2 million cattle would have to be slaughtered in 1943 to meet these requirements. The expected average dressed weight of 484 pounds per animal is 17 pounds lower in 1943 than in 1942 largely because price ceilings on beef generally will discourage fattening of cattle to high finish and heavy weights.

The 1943 requirements of 1,197 million pounds of veal, if obtained, would have to be obtained from production in 1943 as no carry-over from 1942 nor imports are expected. Assuming an average dressed weight of 110 pounds per calf, which is about the same as recent years, 10.9 million calves would have to be slaughtered in 1943 to meet the requirements.

Feasible Production in 1943

The estimated number of cattle and calves on farms January 1, 1943 is 76.2 million, about 2 million more than the record number in 1934. Four hundred thousand cattle and calves probably will be imported. The calf crop in 1943 is estimated at 32.6 million head.

This number of cattle and calves will be a heavy draft on the carrying capacity of ranges and pastures, and harvested forage, particularly if the high forage production of recent years is not obtained again in 1943. As large or larger annual production of beef probably could be obtained, especially in the range States, from a slightly smaller number of cattle. It is feasible, therefore, to increase slaughter of cattle and calves in 1943 compared with 1942. This increased slaughter can be achieved partly by carrying over 600,000 fewer stock cattle and 300,000 fewer beef cows into 1944 than probably will be carried over into 1943. Moreover, it is estimated that the calf crop will be 800,000 head more in 1943 than in 1942. As indicated in the table below, these changes in numbers of cattle in 1943 not only would not jeopardize the maintenance of production of beef and veal on a high level, but would facilitate sustained production during the next few years.

On the basis of these assumptions, a total slaughter of 30.4 million cattle and calves can be obtained in 1943. Of the total, 20.1 million would be cattle and 10.3 million would be calves. The increase over 1942 in slaughter is proportionately greater for calves than for cattle because of the large increase in dairy calves. If 20.1 million cattle are slaughtered and the dressed weight averages about 484 pounds, a total production of beef of 9,741 million pounds would be obtained. A slaughter of 10.3 million calves would yield 1,133 million pounds of veal, if dressed weights average 110 pounds. The total production of beef and veal would be 10,874 million pounds.

Production Goals for 1943

The feasible production of beef and veal together is only 110 million pounds below the total minimum requirements of 10,984 million pounds that will have to be met from 1943 production. Stocks at the beginning of the year and imports probably will total 235 million pounds. It is suggested therefore that the goal for beef and veal be the same as the feasible production -- 30.4 million cattle and calves slaughtered

Cattle and calves: Feasible number on farms January 1, imports, calf crop, and slaughter, 1943-44, with comparisons

Item	1939	1940	1941	1942	Feasible		
	1939	1940	1941	1942	1943	1944	1945
	Mil. head	Mil. head	Mil. head	Mil. head	Mil. head	Mil. head	Mil. head
Cattle and calves on farms January 1 :							
Cows 2 years old and over, :							
for milk	24.6	24.9	25.5	26.3	27.1	27.6	27.6
for beef	10.0	10.6	11.2	12.0	12.1	11.8	11.8
Total	34.6	35.5	36.7	38.3	39.2	39.4	39.4
Other cattle and calves	31.4	32.7	34.8	36.3	37.0	36.4	35.9
Total	66.0	68.2	71.5	74.6	76.2	75.8	74.6
Calf crop	28.8	29.8	31.0	32.0	32.8	33.1	
Imports of cattle and calves8	.6	.7	.6	.4	.4	
Total number	95.6	98.6	103.2	107.2	109.4	109.3	
Slaughter :							
Cattle - Federally inspected	9.4	9.8	10.9	12.6	14.1	14.4	
Non-inspected	5.2	5.2	5.5	5.7	6.0	6.2	
Total	14.6	15.0	16.4	18.3	20.1	20.6	
Calves - Federally inspected	5.3	5.4	5.5	5.7	6.2	6.6	
Non-inspected	3.9	3.7	3.8	3.3	4.1	4.3	
Total	9.2	9.1	9.3	9.5	10.3	10.9	
Total slaughter	23.8	24.1	25.7	27.8	30.4	31.5	
Other disappearance	3.6	3.0	2.9	3.2	3.2	3.2	
Total disappearance	27.4	27.1	28.6	31.0	33.6	34.7	
Number end of year	68.2	71.5	74.6	76.2	75.8	74.6	

1/ Preliminary estimates.

and 10,861 million pounds of beef and veal produced. This 1943 goal, compared with the number of cattle and calves slaughtered in 1942, would represent an increase of 9 percent. The increase in production of beef and veal would be 7 percent.

Prospective Problems of Attaining 1943 Goals

It is unlikely that the unusually favorable forage and feed situation that has prevailed the past several years throughout most of the range country will recur again in 1943. A light drought over any significant part of the western range country would mean feed shortages there and would result in a reduction in condition, quality, and weight of cattle marketed. The adjustment of cattle numbers and the providing of adequate feed reserves in high-hazard areas so as to obtain the maximum output of beef by a reasonably stable balance between cattle and normally expected feed supplies will continue to be the principal problem in the range country. Any surplus feeds should be used for putting more weight on cattle for market and for building up feed reserves rather than for increasing breeding herds. In the Pacific Coast market area, because of increased military and civilian demands, it is urgent that efficient utilization be made of western production of roughage, wheat and feed grain for giving a reasonable finish to a higher percentage of cattle going to market from both ranges and pastures.

There is some evidence that cattle frequently are held on the range until after they have reached their maximum weight or have actually lost weight before gathering and shipping. Late grazing is also hard on the range. In meeting wartime needs for beef it is important that stockmen endeavor to market cattle when they are in the optimum condition for sale. Moreover, earlier marketing of some cattle would serve to avoid in part the peak load on transportation facilities in October and November.

In the Corn Belt, the problem will be to obtain the maximum output of beef with the kinds of feeds that will not have a higher-use value for feeding to other classes of livestock. The place of beef cattle in a wartime livestock feeding program would seem to be that of consuming hay and roughage for which there is no other alternative use, together with sufficient grain and high-protein feeds to produce a reasonable degree of finish. Beyond this point it may be better to feed grain to hogs and milk cows rather than to beef cattle. Long-fed, highly-finished cattle are a wasteful use of feed from the standpoint of obtaining the maximum output of beef. Moreover, medium and good grades of cattle yield the kind of beef bought for the armed forces and by the bulk of civilians.

In order to meet the goal for beef production, cattle feeding must be continued at a high level. Considerable adjustment in cattle feeding operations, however, will be needed to conserve feed grains and to adjust to ceiling prices on beef. Feeding of a large number of cattle, even larger than in recent years, to a reasonable degree of finish is necessary both because of the need for adding weight to as many cattle as practicable before they are slaughtered, and because it gives a better distribution of slaughter throughout the year. The feeder who has good hay and pasture, and perhaps silage, can help in meeting wartime needs for meat by using these feeds, together with a light ration of corn and high-protein feed during most of the feeding period, for fattening cattle in poor condition for immediate slaughter. For the last 30 to 60 days, the ration can be increased to a full feed of grain.

Competition of corn and soybeans with hay and pasture will further reduce the acreage of forage crops. Because of the reduced acreage of these crops and because the beef cattle enterprise must rely more on good quality pastures and roughages, the seeding of legumes and legume mixtures will become increasingly important.

Shortages of workers for irrigating, haying, and handling cattle on ranches and farms are certain to hinder production. It will become an increasingly serious problem. Insofar as it may be consistent with man power policy, more attention should be given to the special skills necessary for handling cattle on ranches and farms in the programs for recruiting, training, and placement of workers and in the administration of the Selective Service System.

Transportation difficulties, emerging but not serious in 1942, will grow more acute during 1943. Reduced trucking facilities will impede the movement of cattle to market, the movement of feed into deficit areas, and the general operation of ranches and farms. Commercial truckers will tend to abandon range livestock hauling and trailing will increase. This will raise problems of trailway rights, labor, feed and water supplies. The supply of railroad stock cars, if not diverted to other uses, probably will be adequate for moving cattle even in the peak shipping season in October, but a general congestion in traffic by rail may develop due to shortages of locomotives or other general equipment.

The essential nature of motor transport in range and ranch operations and long distances of necessary travel need to be taken into account in allocating gasoline, tires and repairs. Everywhere all transportation facilities should be utilized as efficiently as possible even though they are currently adequate. The use of trucks can be economized by more efficient pick-up service. Cross-hauling and duplication of service should be reduced to a minimum. Trucks should be loaded to capacity. Available rail transportation should be used in place of trucks for moving livestock long distances wherever feasible.

Processing plant facilities probably will be adequate for the slaughter of cattle.

PRODUCTION GOALS FOR LAMB AND MUTTON FOR 1943

SummaryProduction and Supplies in 1942

The number of sheep and lambs on farms and ranches at the beginning of 1942 totaled 56.0 million head, the largest number on record. The 1942 lamb crop of 32.2 million head was slightly smaller than the record large crop of 1941. Marketings of sheep and lambs for slaughter so far in 1942 have been about 8 percent larger than a year earlier, and some reduction in breeding stock appears to be under way. Present indications are that total slaughter of sheep and lambs in 1942 will exceed slightly 24 million head, about 1 million head more than the previous record slaughter in 1931. It is estimated that from this large slaughter a total output of lamb and mutton of about 990 million pounds will be produced.

Requirements for 1943

Total minimum requirements for lamb and mutton for all purposes in 1943 are estimated at about 990 million pounds. Military needs are about 92 million pounds. Requirements for land-lease and commercial exports are negligible. Civilian requirements of 897 million pounds slightly exceed consumption annually from 1936 to 1940 but will fall only 3 to 4 percent below supplies for civilians in 1941 and 1942. Assuming the same yield per head as in 1942, a total slaughter of sheep and lambs of 24.1 million head would be necessary in 1943 to produce the estimated total requirement for lamb and mutton.

Production and Marketing Goal for 1943

A production goal of about 990 million pounds of lamb and mutton, requiring a slaughter of 24.1 million sheep and lambs, is recommended. This goal is approximately the same as the number slaughtered last year and the 1943 minimum requirements. A slaughter of this size would cause some further reduction in the number of sheep on farms and ranches in 1943. But because of the current high level of sheep numbers, it would give a better balance between normal forage and feed supplies and livestock numbers in the range States. And it would not jeopardize a continued high level of lamb and mutton, and wool production. Some increase in sheep and lamb feeding is recommended as a means of maximizing total wartime production.

Production Problems in 1943

The biggest problem facing sheep producers in 1943 is the growing shortage of herders and other experienced workers on sheep ranches. This problem is becoming serious. Other problems include increasing competition for pasture and supplemental feeds, decreasing trucking facilities, and general increases in production costs. Production in 1943 and subsequent years may also be influenced to a considerable degree by less favorable weather and feed conditions than have existed in the last 2 years.

Recommendations

The labor situation is becoming so serious that deferment by the Selective Service System of many herders and other experienced workers on sheep ranches seems to be desirable.

The Situation in 1942

Total supplies of lamb and mutton in 1942 are expected to be the largest on record. They probably will exceed the goal set for the year by 5 percent, 1941 production by 6 percent, and 1936-40 average production by 13 percent. Federally inspected slaughter of 12,758,000 sheep and lambs during the 8-month period, January-August, exceeded slaughter of 1941 by 8 percent. The August slaughter was 21 percent higher than last year. As federally inspected slaughter during the rest of the year

11 percent greater than for the same period last year appears probable, a total slaughter (Federal inspected and non-inspected) of 24.1 million head probably will be obtained. This number of head slaughtered would produce 988 million pounds of lamb and mutton, assuming an average dressed weight of 41 pounds. This production, together with 8 million pounds carried over, would provide for the 47 million pounds estimated as required for the military, 3 million pounds for exports, 5 million pounds for carry-over, and leave 941 million pounds for civilian needs.

With slaughter of 24.1 million sheep and lambs, other disappearance of 0.7 million head, and a lamb crop of 22.3 million, the number on farms and ranches on January 1, 1943 will be about 500,000 head, or 1 percent, less than the record number of 56 million head on farms and ranches January 1, 1942. Death losses have been unusually heavy this year and other disappearance may exceed 8.7 million, causing a reduction of more than 500,000 in numbers in 1942. It appears that the reduction will occur largely in the so-called Western sheep States, made up of the 11 far Western States, Texas, and South Dakota. Heavy shipments already have come out of Texas. Dry weather and labor difficulties appear to be encouraging heavier than normal shipments from other parts of the West.

Several years of favorable weather and range forage production in the Western sheep States helped to build up an optimistic outlook by producers and resulted in peak numbers of sheep in these States on January 1, 1942.

The increases were primarily in the six Great Plains States, especially in Texas and South Dakota. Numbers of stock sheep in the 11 far Western States were about 4 million head below the 1931 peak numbers in that area. But a cold, late spring, with delayed and inadequate range forage and short hay and other supplemental feed supplies in parts of the West, together with inadequate labor, cut the lamb crop this year below the record crop of 1941. Losses of breeding ewes were also rather large.

By far the most critical problem confronting sheepmen has been the increasingly difficult labor situation. Many sheepmen have had to depend upon inexperienced herders and other help, and this has tended to increase losses and hold down weights of lambs and wool production. It probably has caused heavy shipments of replacement ewe lambs from the western range States.

Requirements for 1943

The total requirements of lamb and mutton in 1943 for all purposes is estimated at 994 million pounds. They are about 4 percent of the entire meat requirements. Of the total, 92 million pounds, less than 10 percent of the total, are anticipated military needs, 897 million pounds are minimum civilian requirements, and carry-over is estimated at 5 million pounds. Although these requirements are slightly higher than the 1936-40 supply, they are 3.5 percent short of the supply available in 1941 and 4 percent short of the 941 million pounds expected to be available for civilians in 1942.

The requirements set for the civilian population will provide a per capita consumption of 7.1 pounds. This compares with a per capita consumption of 6.7 pounds in 1936-40 and 7 pounds in 1941, and 7.2 pounds expected to be available in 1942.

It is expected that both commercial and lease-lend shipments of lamb will be a minor factor in the whole requirements picture in 1943. Military and lease-lend requirements, however, may be much greater than estimated. With reduced supplies of beef and pork for civilian consumption in 1943, it seems highly desirable to obtain a maximum supply of lamb and mutton.

Supplies for 1943

Respective Stocks and Imports, and Production Desired

Stocks of lamb and mutton that will be carried over from 1942 are estimated at about 5 million pounds. Imports probably will be negligible in 1943. Production

In 1943, therefore, would have to be about 989 million pounds to meet the requirement for domestic consumption and for carry-over. Assuming an average dressed weight of 41 pounds per animal, about 24.1 million sheep and lambs would have to be slaughtered.

Feasibility of Production Desired

A slaughter of 24.1 million sheep and lambs can be attained in 1943. Slaughter anticipated in 1942 will leave the number of sheep and lambs on farms at near-peak levels and only slightly below the start of 1942. Sheep numbers in the 17 western range States will still be close to the peak of 41 million reached on January 1, 1942. Anticipated decreases in numbers in Texas may account for much of the total decrease in the country. Slight increases are expected to occur in several of the Plains States from North Dakota to Oklahoma, with minor increases in other Western States. Adjustments in numbers in different Western States and regions being made this year should give a somewhat better balance between numbers of livestock on hand and forage and feed supplies. In view of the heavy production of hogs, dairy and beef cattle in the Midwest, it does not seem feasible for that area to increase sheep numbers this year.

Slaughter prices for fat lambs appear to favor feeding and it is probable that sheep and lambs on feed January 1, 1943 will equal or possibly exceed the peak numbers on feed January 1, 1942.

Ranges, generally, are in relatively good condition after several favorable growing seasons. Hay production this year is expected to be high, furnishing what now appear to be ample supplies for this winter and for the spring of 1943. Such a feed supply under normal conditions would encourage a high percentage lamb crop and limited losses. By rigid culling of old ewes and replacement with younger animals, and by approved breeding practice this fall and moderate grazing on breeding ranges, the lamb crop could be increased in 1943. Reduced losses and good weight of lambs could be obtained by application of other livestock management practices and by improved range and pasture management. Such management, however, will require special effort on the part of owners. Many stockmen are already modifying their management in such a manner in an effort to offset inadequate labor and other war handicaps.

It must be recognized, however, that very serious difficulties confront the sheep industry in the range States, where 75 percent of the sheep of the country are produced, and that they make the realization of a high lamb crop and reduced death losses improbable. The range sheep industry is dependent upon skilled and dependable hired labor more than any other range livestock enterprise. If such labor is not available in sufficient supply, either operations must be curtailed or carried on at a much reduced level of efficiency. The labor situation is becoming increasingly bad. More nearly normal range forage production than in 1940 and 1941, and especially unreasonable weather or drought, might also affect the lamb crop, just as the late spring and short feed supply did this year.

A lamb crop of 31 to 32 million head, depending on the carry-over of ewes, seems feasible in 1943. Assuming a lamb crop of 32 million head, sheep and lamb slaughter of 24.1 million head can be attained with only a slight reduction, approximately 1 percent, in total numbers of sheep and lambs on farms and ranches January 1, 1944. In view of present high numbers, this minor decrease in sheep population would not jeopardize a high level of production and slaughter during 1944 and the rest of the war period. The basis for these calculations, taking into account death losses and other factors affecting marketing, are shown in the table below.

Production Goals for 1943

Since it is feasible to attain the production requirements of 989 million pounds of lamb and mutton with only a minor decrease in numbers of sheep and lambs on farms in 1943, a production of that amount is recommended as the goal for 1943. A slaughter of 24.1 million sheep and lambs will be required to attain the lamb and mutton goal, assuming dressed weights of 41 pounds per animal. The attainment of this goal in 1943 will still permit the same production and slaughter in 1944 with only a slight further reduction in total number of sheep and lambs by the end of 1944.

In fact, numbers at that time would approximate what they were at the start of 1941, the year in which peak numbers were attained. Accordingly, the possibility of sustained high production and slaughter for the war period is not jeopardized by the recommendations.

Sheep and lambs: Feasible number on farms January 1, lamb crop, imports, and slaughter, 1943, with comparisons

Item	1940	1941	1942	Feasible	
	1940	1941	1942	1943	1944
	Million head	Million head	Million head	Million head	Million head
On farms January 1					
Even, 1 year +					
Western sheep States	24.9	25.4	25.7	25.4	25.4
Native sheep States	11.0	11.3	11.6	11.6	11.6
Total	35.9	36.7	37.3	37.0	37.0
On feed	5.8	6.5	6.8	6.9	6.8
Other	10.7	11.1	11.9	11.6	11.1
Grand total	52.4	54.3	56.0	55.5	54.9
Lamb crop	31.3	32.9	32.3	32.0	
Imports	.0	.0	.0	.0	
Total supply	83.7	87.2	88.3	87.5	
Slaughter					
Federally inspected	17.4	18.1	19.7	19.7	
Non-inspected	4.2	4.2	4.4	4.4	
Total	21.6	22.3	24.1	24.1	
Exports	2/	.0	.0	.0	
Other disappearance	7.8	8.9	8.7	8.5	
Total disappearance	29.4	31.2	32.8	32.6	
Number on farms end of year	54.3	56.0	55.5	54.9	

1/ Preliminary estimates.

2/ Negligible.

Prospective Problems of Attaining 1945 Goals

The outstanding problem confronting the attainment of 1943 lamb and mutton goals will be that of labor. The heavy drain on herders and other labor to the armed forces and war industry will necessitate the use of large numbers of inexperienced and inefficient help. This will place a very heavy responsibility on sheepmen to train their help and to currently check their work in an effort to avoid serious losses and decrease production.

Production in 1943 and subsequent years may be influenced to a considerable degree in the range States by less favorable weather and feed conditions than have existed in the last 2 years. In the Midwest, sheep will face increased competition from increased numbers of hog and dairy cattle for pasture and feed. Increased supplemental feeding and inefficient labor will undoubtedly increase production cost.

Transportation difficulties hindering production slightly in 1942 will become more acute in 1943. Strict rationing of gasoline and tires and otherwise reduced trucking facilities will hamper movement of sheep between seasonal ranges and to market, the movement of feed for supplementing range forage, and the general operation of ranches and farms. Increased trailing of sheep may adversely influence the weight of lambs. Facilities for rail shipments of sheep are expected to be reasonably adequate although a general congestion in rail traffic might occur.

Demand for 9 million Grades 1 and 2 shearling pelts for the military in 1943 will alter shearing and feeding practices to some degree but it is not believed that this will adversely affect mutton and lamb production.

1943 GOAL FOR WOOL

Summary

Production and Supplies in 1942

The carry-over January 1, 1942 was about 550 million pounds, of which 185 million pounds was in the Government stockpile. Domestic production is estimated at 485 million pounds -- 392 million pounds of shorn wool and 93 million pounds of pulled wool (gross basis). Although considerable concern existed early in the year about the possibility of a wool shortage, about 500 million pounds of apparel wool were imported during the first six months of 1942. It appears now that imports will continue relatively high during the rest of the year. It was estimated early in July that not less than 800 million pounds will be imported during 1942. Assuming such production and imports, the total supply of apparel wool for 1942 will be 1,836 million pounds.

Mill consumption of apparel wool during the first six months of 1942 was 522 million pounds, nearly 80 percent of which has been for the military. At this rate, 1,050 million pounds of apparel wool will be consumed during the year. Assuming consumption of 1,050 million pounds, the carry-over will be approximately 786 million. If imports in the last half of the year continue as heavy as in the first half, the carry-over might reach 1 billion pounds. Through an arrangement with W.P.E., the Army has contracted or will contract for sufficient woolen goods to be manufactured from domestic wool to use practically the entire domestic clip.

Requirements for 1943

It is anticipated that mill consumption of apparel wool in 1943 will be about 1.1 billion pounds. Military requirements are expected to be about 850 million pounds, about 250 million pounds will be used for manufacture of civilian goods. If available, civilians undoubtedly would take several times this amount.

Military requirements for Grades 1 and 2 shearling pelts have been set at a total of 9 million pelts -- 3 or 4 times the number normally produced.

Supplies for 1943

Domestic production of wool in 1943 probably will be below that of 1942 because of fewer sheep in 1943, lighter fleeces, and the shearling program. It is estimated that about 48.5 million sheep and lambs will be shorn in 1943 and that the production of shorn wool will be 383 million pounds. Total production of wool, including pulled wool is estimated at 475 million pounds. Assuming a carry-over of 750 million pounds, and imports of 500 million, total supplies would approximate 1,725 million pounds. Carry-over or imports might readily exceed the assumed amounts.

Recommended Goals for 1943

In view of the rather large carry-over and anticipated liberal imports, it now seems unnecessary to endeavor to increase domestic wool production in 1943. Accordingly it is recommended that the production goal for 1943 be set at 48.5 million sheep to be shorn and an estimated production from them of 383 million pounds. Such a shearing program can be carried out readily if marketings and losses do not reduce numbers of sheep and lambs on farms and ranches below 55.5 million on January 1, 1943. In view of anticipated supplies, it does not appear advisable to undertake additional special programs which would require producers to incur unusual costs or the Government to provide special subsidies. It is, of course, desirable to get as high a wool clip as is feasible without special governmental support or subsidy.

If it seems desirable to set a shearling goal, it is recommended that it be set at 9 million Grades 1 and 2 pelts, the number required for military use in 1943.

Prospective Problems in Attaining 1943 Goals

Many of the problems of achieving the wool production goal are similar to those involved in attaining the slaughter goal of 24.1 million head of sheep and lambs. Such

Requirements for 1943

It is anticipated that military requirements in 1943 will be 850 million pounds or more. This would represent 80 percent or more of total mill capacity, leaving very limited capacity for manufacture of woolen goods for civilian use. Assuming continued operation at near capacity the apparel wool requirements for 1943 would be 1.1 billion pounds. Undoubtedly, civilians would buy several times the quantity of woolen goods which will be available. Even though raw wool might be available for greater manufacture for civilian use, mill capacity is now the limiting factor. Conversion from carpet to apparel wool manufacture may continue on into 1943, but since carpet wool consumption was only about 36 million pounds in the first six months of 1942, the opportunity for further shift is limited.

Military requirements for Grades 1 and 2 shearling pelts have been set at 9 million pelts, or 3 to 4 times normal production. W.P.B. has requisitioned the entire supply of pelts suitable for army use and only pelts which fail to meet Army specifications can be used for civilian purposes.

Anticipated Supplies for 1943

Stocks and Domestic Production

As indicated above, the carry-over may be somewhere between 750 million and 1 billion pounds.

Domestic production may be down slightly from 1942 as it is expected that there will be fewer sheep available for shearing in 1943 than in 1942. It is estimated that 48 to 48.5 million head will be shorn in the regular operations in 1943. The greatly increased shearling production in 1943 may cause some lambs or sheep to be shorn which normally would go to market in full fleece. While this may increase the total wool supply from shorn animals, it will correspondingly reduce the pulled wool supply. As all shearling pelts produced will not meet Army standards the production in 1943 probably will exceed the 9 million pelts desired by the Army. This shearling program may materially reduce normal production of pulled wool even though the anticipated slaughter of 24.1 million sheep and lambs in 1943 is considerably higher than in recent years.

Average weight of fleeces also may be less in 1943 because of inefficient and inadequate labor, poor handling of sheep on the range, increased shearing for shearling production, and the possibility that forage production may not be as satisfactory in 1943 as in recent years, which have been rather favorable. Assuming that 48.5 million sheep will be shorn in 1943 and that average fleece weight will be 7.9 pounds, total production would be 383 million pounds. If pulled wool production, converted to a grease basis, totals 92 million pounds, the total domestic production would be approximately 475 million pounds.

Imports

Imports of wool will depend primarily upon cargo space available from Australia, New Zealand, South Africa, and South America. Imports of wool probably will not fall below 500 million pounds, grease basis, and they may materially exceed that quantity.

Total Supplies

If we assume a carry-over at the start of 1943 of 786 million pounds (700 million of which might be in the Government stockpile), domestic production of 475 million pounds, and imports of 500 million pounds, total supplies for the year would be 1,761 million pounds. Assuming that total consumption will be 1.1 billion pounds, carry-over in 1944 would be 661 million pounds, including that in the Government stockpile.

Table 1.- United States supply and consumption (mill) of apparel wool, grease basis, 1935-39 average, 1940-41 and estimates for 1942-43

Item	1935-39	1940	1941	Estimated	
	average			1942	1943
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
Supplies					
Stocks January 1					
Dealers and manufacturers 1/...	274	200	205	345)	26
On farms	16	14	1	21)	
Government stockpile	---	---	---	185	700
Total	290	214	206	551	786
Domestic production	458	468	488	485	475
Imports 2/					
Australia and New Zealand	45	46	400	400	
South America	31	141	309	250	
South Africa and other	13	47	83	150	
Total	89	234	792	800	500
Unreported stockpile imports ...	---	---	41	---	---
Total reported supplies	837	916	1,527	1,836	1,781
Consumption (mill)					
Civilian	616	583	696	250	250
Military	20	100	325	800-	850+
Total	636	683	1,021	1,050	1,100
Carry-over (calculated)	201	233	506	2/786	2/661
Carry-over reported	248	206	515		
Excess of reported overcalculated ...	47	-27	9		

1/ Excludes wool afloat to United States dealers and manufacturers.

2/ Includes wool in Government stockpile.

Recommended Production Goal for 1943

In view of the large carry-over and of the imports from the Southern Hemisphere that now appear feasible, it seems unnecessary to recommend any effort to step-up domestic wool production in 1943. Accordingly, it is recommended that the production goal for 1943 be set at 48.5 million sheep to be shorn. This number of sheep shorn probably would produce 383 million pounds. This shearing program can be carried out if marketing and losses do not reduce numbers of sheep and lambs on farms and ranches January 1, 1943 below 55.5 million head. In view of the large carry-over, and the anticipation that imports will continue on a liberal scale, it does not appear advisable to undertake special programs which would require producers to incur unusual costs or the Government to provide special subsidies. It is, of course, desirable to obtain as high a wool clip as can feasibly be obtained without special governmental support or subsidy.

If it seems appropriate to establish a shearling production goal, it is recommended that this be set at 9 million pelts of Grades 1 and 2. This is the number which it is understood the military has requested for 1943.

Prospective Problems in Attaining 1943 Goals

Many of the problems of achieving wool production goal are similar to those involved in attaining the slaughter goal of 24.1 million head of sheep and lambs. The labor problem, already becoming serious, will become more critical. The necessity for

using much inexperienced and inefficient help may cause such poor handling of sheep on ranges as to materially reduce average fleece weight.

The general feed situation appears favorable with large crops of hay in prospect. Sheep generally should go into the winter in good condition. Unusually severe winter weather would adversely influence fleece weights and quality while conversely, favorable weather would aid in wool production. A drought during next year would influence the wool clip of 1944 much more than the clip of 1943.

Increased cost of supplemental feeding and inefficient labor will undoubtedly increase production costs although it is anticipated that returns to growers will be sufficient to maintain production at a relatively high level.

Wool growers are concerned about disposal of their wool clips in view of the large Government stockpile that is developing. Consideration should be given to this problem to prevent an adverse influence on domestic production of wool.

REPORT OF THE TOBACCO SUBCOMMITTEE
ON 1943 GOALS

I. Summary.

1. Supplies in 1942. (See Table V, Column 7)

Production and stocks for most types were in accord with the consumption of the previous year. However, anticipated increases in the use of tobacco products, especially cigarettes, are expected to force reduction of manufacturers' normal inventory holdings of flue-cured and Burley during 1942-43. Similarly, supplies of dark types in 1942 will not be in excess of requirements, largely because of the Diversion Programs in 1941 and 1942 which will have cleared out all excess and old stocks.

2. Requirements for 1943.

With continued increases in the consumption of all products except smoking tobacco, it will be necessary to increase production of all types. However, it is contemplated that such increases will be smaller than would be permitted under normal conditions because of the need for the production of other crops.

3. Feasible Production in 1943.

It is believed that it is possible to obtain satisfactory levels of production without appreciable interference with more important uses of resources. With present and anticipated price levels and without some control of marketing it is probable that resources would be used in tobacco production that are more seriously needed in other uses.

4. Adequacy of supplies with feasible production.

The supplies of flue-cured and Burley tobaccos with feasible 1943 production would necessitate continuance of a somewhat abnormally low stock situation. Stocks of other types could be maintained at somewhat better levels, but none the less at levels lower than manufacturers and dealers would probably desire.

5. Goals for 1943. (See Tables I and II)

The suggested 1943 goals for each type of tobacco represent an increase over the 1942 production. Notably the 1943 goals for flue-cured and Burley tobacco are slightly more than 11% and 14% respectively above 1942 production. A flue-cured production of 850 million pounds is recommended as compared with 762.8 million pounds estimated for 1942. A Burley goal of 390 million pounds contrasts with the 341.8 million pound production in 1942. We recommend, however, that these goals not be announced by the Secretary unless they are in agreement with such marketing quotas as may be established for these types. The suggested 1943 goals for other types show increases over the 1942 production ranging from 0.5% in the case of Pennsylvania filler to 42% for Virginia sun-cured. The goal for fire-cured types has been placed at 83 million pounds as compared with the 1942 production of 71.8 million pounds; dark air-cured at 35 million pounds as compared with 27.7; Pennsylvania cigar filler at 51.0 million pounds as against 50.3; and other cigar filler and binder types at 95.0 million as compared with 1942 production of 70.9 million pounds. The large goals for fire-cured and dark air-cured types are contingent upon nicotine diversion programs being continued in 1943. In view of the fact that marketing quotas may be established for these two classes of tobacco; it is recommended, as was the case with flue-cured and Burley, that the goals not be announced unless they are in agreement with marketing quotas.

The desirable production 1/ of the various kinds of tobacco for 1943, as compared with production in 1942 and average production in the 5 years 1936-40 is as follows:

Table 1

Kind of tobacco	: 1943	: 1942	: 1936-40 Av.
	:	:	:
	(Million Pounds)		
Flue-cured	850	762.8	852.7
Burley	390	341.8	346.6
Maryland	33	32.2	29.6
Fire-cured <u>2/</u>	85	71.8	100.9
Dark Air-cured	35	27.7	35.3
Va. Sun-cured	3.4	2.4	2.8
Pa. Filler	51.0	50.3	41.2
Cigar Filler & Binder <u>3/</u>	95.0	70.9	70.7
Cigar Wrapper	11.0	9.8	9.5

The acreage required to produce the above quantities of tobacco, with yields in 1943 equal to the 1937-41 average yields, as compared with the acreage grown in 1942 and the 1942 acreage allotment is as follows:

Table 2

Kind of tobacco	: 1943	: 1942	: 1936-40: Aver-	: 1942: Allot-
	:	:	: age	: ment
	(1,000 Acres)			
Flue-cured	927.0	796.2	956.6	841.2
Burley	414.9	356.4	388.0	383.0
Maryland	42.9	41.5	37.7	—
Fire-cured <u>2/</u>	99.8	78.0	122.9	84.7
Dark Air-cured	38.9	30.2	41.1	36.0
Va. Sun-cured	4.0	2.8	3.3	3.1
Pa. Filler	35.8	34.7	28.6	30.5
Cigar Filler & Binder	71.5	48.7	53.9	62.2
Cigar Wrapper	11.9	9.8	10.1	—

1/ For Flue-cured, Burley, fire-cured, and dark air-cured final recommended production and acreage are subject to marketing quota findings and proclamations by the Secretary prior to December 1.

2/ 1943 production needs based upon a continuation in 1943 of the 1942 nicotine sulphate production program.

3/ Excludes Puerto Rican tobacco for which acreage allotments will have been made and tobacco planted before goals are announced.

6. Suggestions for distribution of limited supplies.

Continuance of the present exemption of the Commodity Credit Corporation from price ceiling limitations, and extension of the same exemption to Agricultural Marketing Administration purchases for diversion, will permit the Government to obtain necessary requirements for Lend-Lease and by-products purposes in the simplest possible manner. As for the remainder of the crop, it does not appear that allocation of supplies among manufacturers and dealers will be necessary. Machinery for such steps, however, should be provided in advance and held ready for use if allocation should be required.

7. Difficulty of obtaining supplies.

Some difficulty is expected next year in allocating fairly limited supplies of fertilizer and in obtaining necessary labor. Cooperative action may somewhat ease the labor situation. Cooperative programs will doubtless be desirable so as to insure that the more limited mileage of producers' automotive vehicles will be sufficient to move the crops to marketing centers.

II. The situation in 1942.

1. Supplies available.

(a) Stocks at the beginning of year (See Table V, Column 4). Stocks of all types were in a somewhat tight but sound position at the beginning of the year. In the case of flue-cured, rising consumption plus continued Lend-Lease exports had finally brought stocks into close statistical correspondence with requirements. Stocks not controlled by the Commodity Credit Corporation were almost exactly two and one-half times the indicated domestic usage of the preceding year, which was in line with the customary practice of holding about thirty-months' inventories to permit the desired aging of leaf and maintenance of blends. Commodity Credit Corporation stocks were in line with Lend-Lease requirements for shipments, which are expected to be about the same as last year in view of the British restrictions on the use of leaf from the United States and their reported intention to hold no more than a six-months' inventory in the United Kingdom. Any further increase in domestic consumption must result in stocks lower than those normally held.

Burley stocks on October 1 are expected to be somewhat tighter relative to domestic usage of the previous year. Exports of this type, never much greater than about 3% of the crop, have declined further and are not an important consideration. Stocks of Maryland appear about in line with the normal behavior of this type. Suggestions a year ago as to spectacular increases in cigarette use of Maryland have not materialized as yet. Fire-cured stocks appear somewhat high as compared with utilization a year ago. However, increases in utilization for by-products programs already approved indicate that for the first time in many years these stocks are in line with requirements. Two years of substantially reduced production have compensated for the loss of most foreign markets, and domestic use in tobacco products has risen moderately. Stocks in 1942 of dark air-cured tobacco (types 35 and 36 only) appear moderately low, after the diversion during 1941 of about 9 million pounds for by-products purposes. Virginia sun-cured stocks appear to be extremely small, holdings of this small crop being less than usage during 1941. Stocks of cigar types were moderately low, in view of significant increases in cigar production.

(b) Production as indicated by the September 1 crop report (Table V, column 5) was closely in line with the goals suggested in January 1942. Flue-cured is estimated at 762.8 million pounds; Burley 341.8 million pounds; and fire-cured 71.8 million pounds. Maryland production increased somewhat over 1941 but did not measure up to the recommended production of 40.4 million pounds. Production of dark air-cured tobacco, including Virginia sun-cured, also fell short of the goals by about 10%. Likewise production of all cigar filler and binder types taken together was below the goals for 1942.

(c) Imports. There are no imports of any of the domestically produced types. The situation as regards these foreign types of cigarette and cigar leaf normally imported is briefly as follows:

Available supplies (Stocks and anticipated 1942-43 imports) of all types of foreign tobacco used in the United States, with the exception of Philippine leaf, are sufficiently large to permit a continuance of their use in normal proportions in tobacco products through 1942-43 and possibly through 1943-44. Stocks of Sumatra cigar wrapper tobacco on July 1, 1942, were estimated at approximately $3\frac{1}{2}$ years' requirements, indicating that the supply would not be exhausted until 1946. Stocks of Oriental cigarette leaf on July 1 were substantially above a year's requirements and even if imports are not continued at the rate of those in 1940-41 and 1941-42, stocks a year hence will probably be near a year's requirement. July 1 stocks of Cuban cigar leaf were at a high level and it is anticipated that shipping facilities will be sufficient to meet consumption requirements.

Stocks of Puerto Rican tobacco in continental United States were larger than in 1941. Supplies in Puerto Rico, including the 1942 crop, are ample to take care of possible requirements. Difficulty in shipping, however, may prevent the movement of supplies to the Continent.

2. Utilization.

(a) Manufacture of all classes of tobacco products with the exception of smoking tobacco is expected to increase this year. Without national income changes there are certain marked current trends in the consumption of products that can be relied on: Increased use of cigarettes; fairly stable consumption of cigars, smoking tobacco, and snuff; and declining use of chewing tobacco. Overall, there is a normal yearly increase in tobacco consumption, largely accounted for by population increases. With significant increases in national income the consumption of all products is larger than otherwise with the exception of a shift from smoking tobacco used for hand-made cigarettes to machine-made cigarettes.

Based on trend and income considerations and heavier use in the armed forces, and checked with the OPA estimates of expenditure on tobacco products, we estimate the following changes for this year. Flue-cured tobacco usage should rise about 10%, based on an expected increase of cigarette consumption of slightly more than that figure and a decline in smoking tobacco use. Burley consumption, with declining manufacture of smoking tobacco and only a moderate increase in chewing to offset the increase in cigarette manufacture, is expected to rise about 5%. Maryland consumption is also expected to rise about 5% because of cigarette increases. Both light air-cured types (Burley and Maryland) are now at a disadvantage for cigarette manufacture as compared with flue-cured because of sugar quotas. The latter type of leaf has a relatively high sugar-content as contrasted with practically no sugar in the light air-cured types.

Domestic utilization of the dark leaf types in tobacco products is expected to increase slightly with larger production of snuff and chewing tobacco. However, the major changes over last year in the domestic disappearance of these types will result from the new program for diversion to by-products uses. Substantial quantities are needed to enable increased manufacture of nicotine sulphate for insecticide use. During the current program most of this will come from fire-cured supplies, as contrasted with larger use of dark air-cured leaf during last year's diversion program. Consumption of cigar types will rise with continued moderate increases in the manufacture of cigars and of scrap chewing tobacco.

(b) Lend-Lease and military. Shipments of flue-cured tobacco under Lend-Lease are expected to be about the same as last year, in view of restrictions placed upon the use of U. S. Tobacco in the United Kingdom and to the greatly increased taxes in that country which for the time being at least seem to have curtailed consumption. Small quantities of dark tobaccos will also be exported under Lend-Lease, in amounts not yet determined.

There are no military requirements for leaf tobacco as such. However, use of tobacco products in the Services is heavy, and is one of the more important elements contributing to anticipated increases in domestic leaf utilization. Informed opinion suggests that men in the armed forces consume more tobacco than the same or an equivalent group of men in civilian life. No summary data is available on sales through Post Exchanges in the United States. Non-tax-paid withdrawals for ship stores and for shipment abroad have risen substantially and continue to increase.

(c) Exports. Aside from Lend-Lease requirements, exports are expected to continue at the extremely low levels of last year. Small quantities of flue-cured and Burley should find their way to South America and the few other neutral areas, such as Portugal. Dark tobacco exports will be made to a great extent in the form of Black Fat to tropical areas of Africa.

(d) Probable Carry-over. Carry-overs of all types are expected to be lower than stocks at the beginning of the year. In almost all cases stocks at the beginning of the year were in fairly close adjustment with normal inventories, but increases in disappearance are expected to be larger than current crops. As an exception, fire-cured stocks were fairly large at the beginning of the year, but demands for by-products purposes will effect a substantial curtailment. Cigar leaf carry-over will decrease consequent to the excess of consumption over current production.

3. Problems encountered in 1942.

Production supplies were available in adequate quantities. No serious shortage of fertilizer was encountered, and insecticides were also obtainable in adequate quantities. Sheet metal for flues and fuel for curing likewise have presented no problem to date. Although some shortage of labor was felt in areas close to war activities, it has been possible to handle the acreage grown. Some difficulty may be expected in replacing machinery parts needed by redryers, but no serious breakdowns are envisaged. The transportation problem, which loomed large at the beginning of the year, has been satisfactorily handled without any highly organized effort, and farmers have managed to get their crops to the market. In fact, in flue-cured areas there has perhaps been more cross-hauling of tobacco between type areas than was necessary.

4. Adequacy of supplies in 1942.

In general, leaf supplies have been adequate on the basis of past consumption. With expected increases of consumption, especially in cigarettes, manufacturers will find it necessary to adjust themselves to somewhat smaller inventories of flue-cured and Burley tobacco. Other types will remain in fairly adequate, though not excess, supply. The flue-cured price ceiling, announced August 29, 1942, will enable the Commodity Credit Corporation to secure supplies needed to meet Lend-Lease requirements.

III. Requirements for 1943.

1. Quantity desired for all purposes.

It is evident from the behavior of present markets and the level of present supplies that manufacturers and dealers would purchase at prices satisfactory to farmers larger quantities of most types than would be desirable to produce from the point of view of the Agricultural Program. Hence we suggest that the true requirements be based upon some further reduction of inventories held for domestic use, particularly in the case of flue-cured and Burley tobacco. As for export requirements, we believe that adequate provision has been made for current needs, both Lend-Lease and commercial. In view of other demands on labor and materials it is not considered advisable to stockpile tobacco against the possibility of a temporary increase in foreign requirements due to restocking in 1944 or some later year. This policy would result in the maintenance of flue-cured stocks at the level expected next July 1. If present predictions regarding consumption are borne out, this will force the curtailment of inventories to a 24-month basis which is below normal as contrasted with 30-months in recent years. Burley requirements are calculated on the basis of an inventory somewhat less than 24-months. Other types are maintained in their normal position, with the exception of Virginia sun-cured where it is not possible in one year to rebuild depleted stocks to a normal level.

2. Military

We have been unable as yet to obtain estimates of the increased purchases of tobacco products by the Services, although it is evident that purchases for Post Exchanges in the United States will increase with the expansion of the armed forces, and it already appears that shipments abroad are increasing.

3. Lend-Lease and other exports. (See Table VI, columns 8 and 9)

Approximately 450 million pounds would be required from the 1943 flue-cured crop to take care of an expected export demand. About 325 million pounds would be needed to replenish stocks in British Empire countries and to provide for current consumption in the Empire and other countries to which shipping is not possible. In the event that the war is terminated before the 1944 harvest, an additional supply of about 175 million pounds might be needed as a stockpile for shipment to continental Europe, China, and other areas to which shipping is now closed. A portion of this, possibly 50 million pounds, might come from old-leaf in the hands of dealers. We have chosen, however, to restrict export requirements to an amount sufficient to replace this year's Lend-Lease requirements of about 250 million pounds and have allowed 25 million for current exports to all other areas.

Exports of other types are expected to continue at the low levels of 1941 and 1942.

4. Domestic disappearance.

We have estimated that flue-cured consumption in 1943 will increase moderately to 575 million pounds, basing this upon as expected slowing up of the rate of increase of cigarette manufacture. The increase in Burley consumption is likewise expected to be at a somewhat lower rate in 1943, taking into account both larger cigarette manufacture and a slowing up in the decline in smoking tobacco use. Maryland consumption is likewise expected to increase somewhat with larger cigarette manufacture. The consumption of fire-cured and dark air-cured, which depends largely on snuff and chewing tobacco consumption, is expected to be fairly stable during 1943 with little change in the manufacture of these products as compared with 1942.

IV. Production desired.

The committee recommends the production of 850 million pounds of flue-cured tobacco, which with the average 1937-41 yield of 917 pounds per acre would necessitate harvesting 927,000 acres. This yield would be the fourth highest on record, and as suggested above, a higher yield would not result in excessive stocks, but would merely diminish the pressure on manufacturers' inventories. It is probable that production would exceed this figure in most acres, given the existing price of flue-cured tobacco. In some areas, however, particularly those producing peanuts, such practices cannot be considered feasible in view of the need for other crops. Hence, we suggest a production goal for 1943 of 850 million pounds. It is likely that there will be significant production difficulties in some areas. Although the fertilizer situation is considered to be "statistically sound" it is unlikely that supplies can be so efficiently distributed as to prevent particular local shortages. Similarly, some further pressure on man power must be expected, with increased industrial activity and expansion of the armed forces. As an offset, it is expected that the completion of army construction projects will induce a slight return flow of labor.

Although transportation problems have not seriously interfered with the present crop, it is clear that the problem will be greater next year, since most tobacco moves to market on rubber tires. The suggestions of the transportation committee presented in report last January may well be reconsidered in connection with next year's crop.

The same general remarks as to production difficulties apply to all tobacco types. The particular recommendations for production of other types likewise require little comment.

Burley production in the absence of marketing quotas would probably run higher than the amount recommended and would handicap efforts to expand hemp acreage in Kentucky. The committee proposes a production of 390 million pounds which would require a harvested acreage of 414,890 at an average yield of 940 pounds per acre achieved during 1937-1941.

Maryland production of 33 million pounds would require 43,600 harvested acres. It would be desirable to expand production of Virginia sun-cured to 3.4 million pounds which would require an expansion of 4,000 acres. The goals for dark tobacco are contingent upon the nature and extent of diversion programs which may be instituted. This year a determined effort is being made to divert approximately 24 million pounds of these types to the production of nicotine sulphate, badly needed to supplement stocks of insecticides. Assuming continuance of such a program next year we would need to produce 85 million pounds of fire-cured on 99,765 acres at average 1937-41 yields of 852 pounds.

Under the same assumption a goal of 35 million pounds for dark air-cured is indicated, requiring 38,900 acres with average yields of 900 pounds. These calculations are based upon the use for by-products of 21 million pounds of fire-cured and 3 million pounds of dark air-cured. In the event that the diversion program is not continued, we suggest that the fire-cured and dark air-cured goals be cut accordingly. Furthermore, in the event of a diversion program of substantial magnitude, we urge that the possibility be explored of granting the extra acreage allotments of fire-cured in the form of a supplementary allotment or program, distinct and separate from the normal allotments. It is highly desirable that such separate treatment be undertaken in view of the poor long-term export prospects for these types and the need for making the situation entirely clear to producers.

The goals proposed for cigar types will approximately replace the leaf consumed this year. To secure the desired amounts with average yields would require the following acreages for Pennsylvania filler, 35,800; other cigar filler and binder, 71,500; and cigar wrapper, 11,900.

V. Suggested programs needed.

Assuming no legal difficulties, and setting marketing quotas at the desired levels, there should be little difficulty in getting the suggested acreage planted. At present it appears that no programs other than those now authorized by existing legislation may be needed.

Although production difficulties are expected to increase somewhat, particularly as regards labor, fertilizer, and transportation, it is not possible to predict their exact incidence. We suggest that some administrative control of fertilizer supplies may be necessary. As for labor and transportation, we suggest that cooperative measures to insure harvest and marketing of the crop may be necessary and that programs of the type prepared by the Tobacco Subcommittee on Transportation last January be prepared and ready in case of need.

Tobacco: Supplies, Production, Disappearance 1936-40, 1941

		1941															
		1936-40															
Kind	Unit	Market- ing Year Beginning	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Million Pounds																	
Flue-cured		July 1	1,013.0	852.7	-	333.0	708.4	1,157.3	1,592.9	650.0	-	290.0	782.9	1,460.0			
Burley		Oct. 1	672.1	346.6	-	10.9	323.3	695.4	798.1	338.1	-	6.0	366.2	770.0			
Maryland		Oct. 1	43.7	29.6	-	4.3	27.7	45.6	51.8	30.2	-	1.0	30.0	52.0			
Fire-cured		Oct. 1	165.0	100.9	-	51.4	105.7	160.2	183.9	73.1	-	11.0	71.0	186.0			
Dark Air-cured		Oct. 1	55.5	35.3	-	8.5	33.1	57.7	70.7	29.4	-	2.5	37.1	63.0			
Va. Sun-cured		Oct. 1	3.0	2.8	-	-	2.6	3.2	3.8	2.2	-	-	3.3	2.7			
Pa. Filler		Oct. 1	100.3	41.2	-	.6	37.6	103.9	114.3	52.0	-	.2	46.1	120.0			
Cigar Filler & Binder 1/2		Oct. 1	187.6	70.7	-	1.1	77.6	180.7	179.4	76.6	-	.5	76.0	180.0			
Cigar Wrapper		July 1	11.2	9.5	-	-	9.1	11.6	12.7	10.1	-	-	9.7	13.1			

1/ Excludes Puerto Rican tobacco.

Tobacco: Acres, Yields and Production 1936-40, 1941, 1942

Table 4

Kind	Per Acre		Acres		Yield		Production			
	1936-40	1941	1936-40	1941	1936-40	1941	1936-40	1941		
1	2	3	4	5	6	7	8	9	10	11
1,000 Acres										
Pounds per Acre										
Million Pounds										
Blue-cured	July 1	956.6	717.6	797.2	993	905	958	852.7	650.0	762.8
Burley	Oct. 1	388.0	342.8	356.4	608	986	959	346.6	330.1	341.8
Maryland	Oct. 1	37.7	40.3	41.5	794	730	775	29.6	30.2	32.2
Fire-cured	Oct. 1	122.9	77.1	78.0	820	948	920	100.9	73.1	71.8
Dark Air-cured	Oct. 1	41.1	30.2	30.2	848	975	915	35.3	29.4	27.7
Va. Sun-cured	Oct. 1	3.3	2.6	2.8	549	850	660	2.8	2.2	2.4
Lc. Filler	Oct. 1	26.6	35.4	34.7	1,440	1,470	1,430	41.2	52.0	50.3
Cigar Filler & Binder	2/ Oct. 1	53.8	54.1	48.7	1,312	1,416	1,456	70.7	76.6	70.8
Cigar Wrapper	July 1	10.1	10.8	9.8	949	933	1,004	9.6	10.1	9.8

1/ September 1, Estimate.

2/ Includes Puerto Rican tobacco.

Tobacco: Supplies, Production, Disappearance, and Stocks, 1942

Table 5

Kind	Unit	Market- ing	Stocks	Production	Imports	Supplies	Commercial	Lease	Exports	Consumption	Carry- over
		Year									
		Beginning									
1	2	3	4	5	6	7	8	9	10	11	12
Million Pounds											
Flue-cured		July 1	1,460.0	762.8	-	2,222.8	25	250	550.0	In- cluded With Civil- ian	1,397.8
Burley		Oct. 1	770.0	341.8	-	1,111.8	5	0	380		726.8
Maryland		Oct. 1	52.0	32.2	-	84.2	1	0	31		52.2
Fire-cured		Oct 1	186.0	71.8	-	257.8		11	73		173.8
Dark Air-cured		Oct. 1	63.0	27.7	-	90.7	2.5	0	32.0		56.2
Va. Sun-cured		Oct. 1	2.7	2.4	-	5.1	0	0	2.7		2.4
Pa. Filler		Oct. 1	120.0	50.3	-	170.3			53.0		117.3
Cigar Filler & Binder 1/		Oct. 1	180.0	70.9	-	250.9			90.0		160.9
Cigar Wrapper		July 1	13.1	9.8	-	22.9			10.5		12.4

1/ Excludes Puerto Rican tobacco.

Tobacco: Supplies, Production, Disappearance, and Stocks, 1945

Table 6

Commodity	1	2	3	4	5	6	7	8	9	10	11	12
		Unit	Market- ing Year	Esti- mated Stocks	Esti- mated Pro- duction	Probable Imports	Supplies	Probable Commer- cial	Exports; Lend- Lease	Consumption : Mili- tary		Esti- mated Carry- over
			Begin- ning									
		Million Pounds										
Flue-cured			July 1	1,397.8	850		2,247.8	25	250	575	In- cluded	1,397.8
Burley			Oct. 1	726.8	390		1,116.8	5	0	400	With Civil-	711.8
Maryland			Oct. 1	52.2	33.0		85.2	1	0	32	ian	52.2
Fire-cured			Oct. 1	173.8	85		258.8	10		75		173.8
Dark Air-cured			Oct. 1	56.2	35.0		91.2	2.5	0	32.0		56.7
Va. Sun-cured			Oct. 1	2.4	3.4		5.8	0	0	2.4		3.4
Pa. Filler			Oct. 1	117.3	51.0		168.3			55.0		113.3
Cigar Filler & Binder 1/			Oct. 1	160.9	95.0		255.9			95.0		160.9
Cigar Wrapper			July 1	12.4	11.0		23.4			11.3		12.1

1/ Excludes Puerto Rican tobacco.

SUPPLEMENT TO REPORT OF THE TOBACCO
SUB-COMMITTEE ON 1943 GOALS

The following table presents the revisions, suggested by the review committee on September 29, in 1943 acreage goals as compared with the 1942 acreage allotments, the 1942 harvested acreage and the 1936-40 average harvested acreage. To avoid confusion among tobacco growers who are accustomed to thinking of tobacco in terms of allotments, it is proposed that the 1943 goals for all kinds of tobacco be the same as the 1943 acreage allotments, except for Maryland and cigar wrapper for which no allotments are made. Final 1943 acreage allotments for flue-cured, Burley, fire-cured, and dark air-cured tobacco will be determined by marketing quota findings and proclamations by the Secretary. Subject to these findings, it is proposed that the 1943 goals for flue-cured and Burley tobacco be 110% and 115% respectively, of the 1942 allotments. It is estimated that these acreage goals will produce a crop of flue-cured tobacco in 1943 around 5 percent less than that recommended by the sub-committee, and a crop of Burley tobacco about equal to the 1943 recommendation. In the case of fire-cured and dark air-cured tobacco it is proposed that the 1943 goals and allotments be 100% of the 1942 allotments plus such increases as may be required to produce additional tobacco needed for the manufacture of nicotine sulphate. This particular need is contingent upon future developments with respect to the insecticide situation and cannot be ascertained with any degree of accuracy now. The proposed goals for Pennsylvania filler and cigar filler and binder tobacco are 110% of the 1942 allotments.

(1,000 acres)				
Kind of tobacco	1943 Goal	1942 Allotment	1942 Harvested	1936-40 Average
Flue-cured	925.3	841.2	796.2	956.6
Burley	440.4	383.0	353.4	388.0
Maryland	42.9	--	41.5	37.7
Fire-cured	84.7 ^{1/}	84.7	78.0	122.9
Dark air-cured	36.0 ^{1/}	36.0	30.2	41.1
Va. sun-cured	4.0	3.1	2.8	3.3
Pa. Filler	33.6	30.5	34.7	28.6
Continental Cigar Filler				
and Binder ^{2/}	68.4	62.2	47.9	52.7
Cigar Wrapper	11.9	--	9.8	10.1
Total	1646.8		1397.5	1641.0

^{1/} Excludes some acreage required to produce additional tobacco needed for the production of nicotine sulphate in 1943-44.

^{2/} Excludes type 45 (Georgia-Florida sun grown filler) for which no allotment is made and for which the 1942 acreage was 800 acres.

SUGGESTED 1943 CANNED VEGETABLE PACKS

The 1942 pack of 12 important seasonally canned vegetables (asparagus, lima beans, snap beans, beets, carrots, corn, peas, pumpkin and squash, spinach, tomatoes, tomato juice, and tomato puree) is estimated to total 175 million cases, basis No. 2's. Although Government requirements are estimated at 45 million cases allocations under Conservation Order No. M-86-A are expected to total slightly more than 55 million cases. There will thus remain approximately 130 million cases for civilian requirements and reserves. This compares with estimated civilian requirements for these same canned vegetables of 108 million cases and the 1937-41 average pack of 117 million cases. In addition, some quantities of other canned vegetables including glass packs will be available for civilian consumption. Considered in the aggregate, the 1942 pack of canned vegetables is expected to meet the estimated Government and civilian requirements. In view of the high level of purchasing power, however, it is probable that the demand will exceed available civilian supplies. The details of requirements and packs by individual commodities are shown in Table I.

Government requirements of important seasonally canned vegetables from the 1943 pack are estimated to total 70 million cases and 110 million are requested for civilian consumption by the Office of Civilian Supply. The suggested 1943 pack of 170 million cases compares with estimated requirements of 180 million. Extreme difficulties will be encountered in attaining these suggested packs. These requirements together with suggested 1943 packs are shown in Table II. These data are subject to the following comments and qualifications:

1. Ample supplies of food are needed in the war effort. The requirements for individual crops are assumed to be flexible with substitution permitted among commodities.
2. It is assumed that adequate supplies of tin will be available for the processing of these packs. It is suggested that unlimited tin be made available for the packing of the more important commodities such as snap beans, corn, peas, tomatoes, and tomato products, and that no tin be permitted the remaining commodities for civilian use. It is assumed, however, that some quantities of these latter commodities will be available to civilians from glass packs.
3. It is assumed that the necessary repairs and additions to facilities will be made available.
4. The requirements shown in Tables I and II are preliminary, confidential, and subject to revision.
5. Particularly in view of the more critical labor situation expected in 1943, it does not appear likely that as large packs of many items can be obtained as in 1942. Hence the suggested packs are less than requirements.

Plans for packs of the restricted commodities should be made as soon as possible in order that canners and growers may make plans for the coming season. These plans which should consider interests of growers as well as canners may be based either on permitting individual canners to pack a certain percent of their pack during a base period or of contracting for the packs with certain canners. The delivery of overages should be permitted if yields are higher than normal. Growers' interests may be protected through minimum price provisions for the raw product. Contracting for the desired packs has certain administrative difficulties in allocations to canners but could be used to secure more efficient utilization of plant facilities in our war effort. Prices paid canners could be either above or below present canners' price ceilings. It is suggested, furthermore, that the entire problem of production, tinsplate, facilities and repairs, Government procurement, and price control be considered as an entity rather than as separate and distinct programs.

The suggested pack of canned asparagus of 1.7 million cases assumes tinsplate for Government requirements with the remainder of the pack in glass. In view of the high level of consumer income, larger than normal quantities can be consumed fresh, particularly from the eastern and midwestern production near the centers of population. It is suggested that consideration be given to restricting the pack of this commodity to the State of California.

In the case of lima beans, beets, carrots, pumpkin and squash, and spinach, the suggested packs are for military and Lend-Lease requirements with small quantities expected in glass for civilians. The pack of carrots suggested is considerably greater than in any previous year but is believed possible of attainment since this commodity may be packed during the late fall, winter, and spring months. Some quantities for processing may be available from the increased acreage recommended for the fresh market.

It is proposed that canned snap beans be allowed unlimited tin and a pack of 16 million cases is suggested. The chief difficulty in increasing the pack of snap beans will be in shortages of labor particularly in harvesting.

The suggested pack of corn of 30 million cases is larger than any previous pack except possibly that of the current season. This crop has relatively small labor requirements for growing, harvesting, and processing.

A 34-million-case pack of peas is suggested for 1943 which would exceed any previous pack except that of the current year. This crop likewise has relatively low labor requirements for growing and processing.

It is proposed that the packs of canned tomatoes, tomato juice, tomato puree, and tomato paste, be allowed unrestricted tin. The division of the crop among the various canned items in part depends upon the availability of labor. Hence it is desirable, in order to eliminate waste, to permit canners to pack these commodities in accordance with their facilities and labor. The bulk of the catsup pack has been in glass and steps should be taken to insure the availability of glass containers for this commodity.

It is proposed that no tin be permitted commodities such as hominy, potatoes and kraut for civilian consumption and that the pack be limited to Government requirements. In the case of sauer kraut it is expected that substantial quantities can be marketed in bulk.

The packs of the principal commodities have been translated into acreage requirements assuming normal yields and normal abandonment. Provision has also been made for a larger quantity for quick-freezing than in past years. In the case of tomatoes it has been assumed that products such as catsup and soup would require substantial quantities of raw tomatoes. Restrictions on the pack of vegetable soups would decrease the acreage required for this crop. An increase in planted acreages of the principal commodities is indicated if these packs are to be obtained and average yields prevail. Any considerable expansion in acreage for 1943 over the current season does not appear probable. These data are shown in Table III.

It is assumed that the present levels of canners' price ceilings now in effect will remain unchanged during the 1943 season. Government underwriting of the pack similar to the canned tomato and pea expansion program of last December appears desirable thus assuring canners of a market for their entire pack. Such a program would not be expected to result in appreciable quantities being turned over to the Government. In order to obtain the acreages some further increases in farm prices may be necessary particularly in view of the labor situation. Government subsidies for this increased cost of the raw product would be necessary if the price ceilings are not broken.

The chief obstacle in the attainment of the suggested packs will be shortages of labor. The necessity for active Government participation in securing ample labor cannot be too strongly emphasized. Transportation facilities, particularly as they affect farm and canner operations, are expected to be critical because of the shortages of tires.

The pack of quick-frozen and dehydrated vegetables is relatively small in comparison with the quantity canned. Green peas and lima beans are the most important quick-frozen vegetables. Since the chief requirements for dehydrated vegetables are for potatoes, onions, and cabbage, which are not canned to any appreciable extent, expansion of this outlet will have little effect on the supplies of the important seasonally canned vegetables. A total of 15 million pounds of vegetables (including potatoes) were dehydrated during the 1941 season. Requirements for the current season total nearly 100 million pounds and those for next year are expected to be somewhat larger. These are chiefly for military and Lend-Lease needs and relatively small quantities will be available for civilian consumption. For these reasons, quantities for dehydrating and quick-freezing have been given little consideration in arriving at the desired packs. From the standpoint of steel utilization, however, shifts to dehydration could be accomplished with the use of relatively little steel compared with the corresponding requirements for tin cans. It is suggested that the commercial possibilities of dehydrating corn with the subsequent reduction in the canned pack, be developed.

Table I
Canned Vegetables: Estimated 1942-43 Packs and Requirements, with Comparisons

Commodity	Estimated : 1942 Pack	Reservation : Under M-86-A	Government Requirements		A.M.A.: Total	Total : Reserves	Civilian and : Requirements /1	Civilian Requirements /2	Average Packs
			Army	Navy					
	1	2	3	4	5	6	7	8	9
-----million cases - basis No. 2's-----									
Asparagus	4.2	1.3	.41	.23	.64	0	.6	3.6	2.8
Beans, Lima	3.0	1.0	1.11	**	1.11	.02	1.1	1.9	1.6
Beans, Snap	17.5	6.1	4.76	1.17	5.93	.32	6.3	11.2	10.0
Beets	6.3	3.2	1.61	.53	2.14	.20	2.3	4.0	0
Carrots	2.5	1.2	2.49	.59	3.08	.25	3.3	- 0.8	0
Corn	31.0	10.8	3.74	1.09	4.83	.03	4.9	26.1	18.0
Peas	35.0	12.2	4.65	1.44	6.09	1.25	7.3	27.7	23.1
Pumpkin & Squash	2.7	1.1	.62	.22	.84	0	.8	1.9	0
Spinach	7.5	2.9	3.25	.72	3.97	.03	4.0	3.5	4.2
Tomatoes	36.0	12.6	4.77	3.00	7.77	2.63	10.4	25.6	25.3
Tomato Juice	26.0	4.4	2.95	.36	3.31	.04	3.4	22.6	19.5
Tomato Puree	3.5	0	.26	**	.26	.31	.6	2.9	3.3
Sub Total	175.2	56.8	30.62	9.35	39.97	5.08	45.0	130.2	108.0 /3
Homing Lye	.6	0	.63	**	.63	0	.6	0	**
Other Vegetables /4	3.7	0	**	**	**	.01	1.6	3.7	**
Pimientos	0.5	0	**	**	**	0	0	0.5	**
Potatoes, Sweet	2.3	0	1.98	.22	2.20	0	2.2	.1	**
Potatoes, White	1.9	0	**	**	**	1.89	1.9	0	**
Sauerkraut	2.5	0	1.27	.89	2.16	0	2.2	0.3	**
Tomato Catsup /7	11.8	4.5	1.93	.83	2.76	0	2.8	9.0	**
Tomato Paste	2.5	0	**	**	**	1.09	1.1	1.4	**
Tomato Sauce	2.0	0	**	**	**	.02	2.0	2.0	**
Vegetable Puree	5.5	0	.06	**	.06	.0	1.1	5.4	**
Vegetable Soup	27.0	0	**	**	**	.02	1.6	27.0	**
Sub Total	60.3	4.5	5.87	1.94	7.81	3.04	10.9	49.4	**
Grand Total /8	235.5	61.3	36.49	11.29	47.78	8.12	55.9	179.6	**

** Not available.

/1. Estimated pack less Government requirements.

/2. Civilian requirements (confidential) as set by the Office of Civilian Supply, preliminary.

/3. Does not include 6.0 million cases "Other".

/4. Includes mixed vegetables, carrots and peas, succotash, okra, and greens other than spinach.

/5. 1940 pack.

/6. Less than 50,000 cases. /7. Actual cases tin and glass.

/8. Does not include miscellaneous items packed chiefly in glass totaling approximately 5 million cases, basis No. 2's.

Table II
Canned Vegetables: Estimated 1943-44 Requirements and Suggested 1943 Packs

Commodity	Requirements					Suggested 1943 Pack
	Military : <u>1</u>	Military : <u>2</u>	A.M.A. : <u>3</u>	Civilian : <u>4</u>	Total : <u>5</u>	
-----million cases - basis No. 2's-----						
Asparagus	1.18	1.14	0	2.8	4.0	3.9
Beans, Lima	1.87	1.00	.03	1.6	3.5	2.6
Beans, Snap	9.37	6.12	.30	10.0	19.6	16.4
Beets	3.36	3.33	.22	0	3.6	3.6
Carrots	4.99	1.63	.28	0	5.3	5.3
Corn	7.60	11.53	.03	18.0	25.6	29.6
Peas	9.58	14.65	1.25	23.1	33.9	39.0
Pumpkin and Squash	1.30	1.39	0	0	1.3	1.4
Spinach	6.42	3.50	.05	4.2	10.7	7.6
Tomatoes	12.02	15.40	2.50	25.5	40.0	43.4
Tomato Juice	5.40	4.92	.05	21.5	27.0	26.5
Tomato Puree	.43	.48	.35	4.0	4.8	4.8
Sub Total	63.53	65.09	3.06	110.7	179.3	180.7
Hominy, Lye	1.06	1.06	0	**	**	**
Potatoes, Sweet	3.75	3.47	0	**	**	**
Potatoes, White	**	**	1.90	**	**	**
Sauerkraut	3.37	3.42	0	**	**	**
Tomato Catsup	4.30	4.52	0	**	**	**
Tomato Paste	**	**	.50	**	**	**
Sub Total	12.48	12.47	2.40	**	**	**
Total <u>6</u>	76.01	77.56	7.46	**	**	**
						195.7

1. Military requirements estimates in July.
2. Military requirements estimated on 1942 procurement basis.
3. Civilian requirements (preliminary, confidential) as set by the Office of Civilian Supply.
4. Col. 1 plus Col. 3 plus Col. 4. 5. Col. 2 plus Col. 3 plus Col. 4. 6. Not including quantities of other vegetables packed in glass and not including exports of above vegetables estimated at 1.0 million cases.
7. Actual cases, tin and glass.

Table III

Canned Vegetables: Computation of Planted Acreage Needed to Obtain
Suggested 1943 Packs With Comparisons

Commodity :	Suggested : 1943	Assumed : Pack	Estimated : Raw	Estimated : Raw	Total : Raw	Average : Yields	Average : Abandon-	Planted : Acreage	Planted : Acreage	Feas-		
											Requirement: Other Uses: Requirement: 1937-41: ment : 1943 : Average: 1941: 1942 : ible	
1	2	3	4	5	6	7	8	9	10	11	12	
million cases, cases						tons per per						
basis No. 2's per ton						acre cent						
-----1,000 tons-----						-----1,000 acres-----						
Beans, Lima	2.1	90	23	12	35	.57	5	65	47	65	76	11
Beans, Snap	16.0	90	178	6	184	1.74	7	114	65	88	104	11
Beets	3.6	65	55	6	55	5.96	11	10	12	19	17	11
Corn	30.0	23	1,300	25	1,325	2.46	7	580	370	455	498	11
Peas	34.0	90	377	45	422	.88	5	500	325	385	483	496
To- Canned)	34.0	332	1,020									
ma- Juice)	30.0	48	625	1,264	3,293	5.19	6	675	430	469	612	647
toes Puree)	7.0	38	184									

1. Feasible acreage not given separately.
2. Estimated same as 1941-42.

Production Goals,
1943W H E A TSUMMARY

On the basis of current indications the carry-over of old wheat July 1, 1943 will be about 800 million bushels. An examination by States of "the 1943 feasible" of 54.7 million acres and of the feasible substitution of war crops for wheat, the average of AAA normal yields by States, a crop of 651 million bushels would be produced. Carry-over of 801 plus a crop of 651 and probable imports of 2 adds to a total likely supply in 1943-44 of 1,454 million bushels. Allowing exports and shipments of 70 million bushels and total domestic disappearance of 884 million bushels would leave a total carry-over of 500 million bushels. Of this (1) 250 million bushels is considered normal for ordinary use to provide for years of extremely small yields per acre under present programs; (2) 50 million bushels set aside for relief under the International Wheat Agreement; and (3) 200 million bushels as stock pile. The last item would be available for synthetic rubber production in 1943-44 and as a feed supply reserve. The 200 million-bushel stock pile represents production on 16 million acres, assuming normal yields.

Owing to the fact that a goal of 5.25 million acres is a reduction under the announced 1943 national wheat allotment of 55 million acres (and even from the 53.4 million acres in 1942 when winter wheat plantings were under intentions because of unfavorable weather at seeding time), it is felt that a further reduction in seedings is not likely.

It is doubtful whether the reduction to the goal level can be attained in view of the advanced stage of seeding operations. In June in connection with the announcement of the national allotment, the Secretary "asked wheat producers whose lands and equipment are suitable for growing other crops needed more urgently in the war effort to hold this land for those crops rather than plant it to wheat this fall". In mid-September a telegram was sent to State War Boards asking that farmers underplant their 1943 wheat allotments as much as practicable.

The production and marketing problems in 1943-44 will be similar to those in 1942-43. With a larger July 1 wheat carry-over in prospect, finding storage space for the new crop will again be a serious problem. Both rail and available water transportation will again be taxed. Worn tires will undoubtedly increase local transportation difficulties. Labor will also be an increasing problem both on farms and in the milling industry, although wheat is produced with relatively little labor compared with the production of many other crops. The supply of farm machinery and equipment is expected to be more of a problem in 1943-44 than during the present year, especially in areas where poor crops have not made their full use necessary in recent years. The bag situation may again be acute at harvest time in the Pacific Northwest.

THE SITUATION IN 1942

The carry-over July 1, 1942 was 633 million bushels, the crop indicated at 982 and probable imports 2, making total supplies 1,617 million bushels. Total domestic disappearance is expected to be 762 million bushels (civilian food 486, military 32, feed 150, seed 64, and ethyl alcohol 80). Total exports are estimated at 54 million bushels. This would leave a record carry-over July 1, 1943 of about 801 million bushels. Supplies of all classes of wheat are plentiful except soft red winter, the shortage of which is the result of reduced acreages and poor yields in important producing States.

REQUIREMENTS FOR 1943

Domestic disappearance in 1943-44 is expected to total about 884 million bushels, consisting of civilian food 480, military 50, feed 200 (based on an assumption of feed shortage and some relaxation of present limitations on feeding wheat), seed 64, and ethyl alcohol 90. Exports, shipments and lend-lease are expected to total about 70 million bushels. The carry-over at the end of 1943-44 is expected to be about 500 million bushels.

SUPPLIES FOR 1943

Supplies in 1943 are estimated at about 1,454 million bushels, based upon old-crop stocks of 801 million bushels, a crop of about 651 million bushels and imports of about 2 million bushels. With soil moisture conditions very favorable over most of the winter wheat area, yields of winter wheat in 1943 may exceed this average. The production figure is based on an acreage of 52.5 million

acres and AAA normal yields. An examination by States of "The 1943 Feasible" of 54.7 million acres and of the feasible substitution of war crops for wheat, indicated a 1943 goal of 52.5 million acres. The national allotment is 55 million acres, the minimum under the law.

With a view to advising farmers before seeding time, to underplant allotments the following telegram was sent to State War Boards in mid-September: "With supplies of wheat already overtaxing storage facilities, and with continuing or expanding need for war crops in 1943, it is desirable that farmers underplant 1943 wheat allotments as much as practicable and reserve this extra acreage for such war crops as can be grown satisfactorily, and for feed grain crops, except corn in the commercial corn counties, wherever such feed crops will produce about as much feed as wheat. War crops in 1943 will include soybeans for beans, flaxseed, dry beans, dry peas, cover crop seeds, sugar beets, SxP cotton, hemp, peanuts for oil, castor beans, and possibly others to be named later. Under plans for 1943 ACP full wheat payment will not be made unless 90 percent of wheat allotment is planted, except that in meeting this requirement approved war crops may be substituted acre for acre for wheat. Price support programs will be developed wherever necessary to support prices of war crops; in the case of feed grains through support prices on livestock and livestock products."

PROGRAMS SUGGESTED

An acreage goal of 52.5 million acres is suggested as attainable through the substitution of war crops for wheat. To reduce the wheat acreage below that level would obtain little, if any, addition in the production of war crops and it would actually reduce the production of grain feed units.

In view of the very large carry-over of wheat, the acute storage situation, and the maintenance of the goal at near the allotment level, the committee suggests that wheat be regarded more as a supplementary feed crop.

A goal of 52.5 million acres is feasible, but it will probably not be attained unless strong incentives are provided for substitutions of war crops in spring wheat areas, accompanied by a vigorous educational program.

Production Goals,
1943R Y E

Stocks of rye at the beginning of the 1942-43 year (farm stocks June 1 and commercial stocks July 1) are 31 million bushels, crop indicated at 60 million bushels, and imports in the neighborhood of possibly 15 million bushels, making a total 1942-43 supply of about 106 million bushels. Domestic disappearance of 9 million for food, 33 for feed (a substantial increase from the 21 million bushels in 1941-42), seed 8, and alcohol 2, totals 52 million bushels. With probable lend-lease exports of 3, the carry-over at the beginning of the 1943-44 year on this basis would be about 51 million bushels.

The requirements for domestic use in 1943-44 are now estimated at 54 million bushels, consisting of 9 for food, 35 for feed, 8 for seed, and 2 for alcohol. Lend-lease and other exports will probably be about 4 million bushels. With a carry-over at the beginning of the year of about 51 million bushels, and allowing for a sizable carry-over at the end of the year, only a very small crop would be required in 1943. A substantial reduction in acreage greater than would be brought about by the replacing of rye with other crops, however, is not likely to occur in the absence of an allotment program. There is now no provision for production control, primarily because of the administrative difficulties involved in controlling the acreage of a crop planted so largely for cover and pasture.

The feasible acreage for 1943 was placed at 3,787,000 acres. A review of the acreages in the States in which some reduction might take place indicates an attainable possible goal for 1943 of 3.6 million acres. Assuming a yield of 11.1 bushels, the 20-year average yield weighted by State acreages, a production of 40 million bushels would be indicated. As in the case of wheat, soil moisture conditions are very favorable and yields in 1943 may be higher than average. With rye prices likely to be considerably higher than prices in Canada it is estimated that at least 10 million bushels may be imported in 1943-44.

With a carry-over of about 51 million bushels, a production of at least 40, and imports of about 10, total supplies in 1943-44 will be at least 101 million bushels. Total domestic and export requirements of 58 million bushels would reduce this by only 58 million bushels, leaving year-end stocks of about 43 million bushels. Of this, 15 could be considered "normal", and 10 as emergency stocks, leaving 18 million bushels as a stockpile reserve.

This stock pile reserve is large only in relation to the needs of this particular grain. A part of this might be diverted to the use of alcohol for synthetic rubber production, or considered as an extra feed reserve. Moreover, rye is a commodity for which considerable demand might obtain after the war from the U.S.S.R. and northern Europe, and for this reason it would be well to have a substantial stock pile.

R I C E

With the Asiatic supply of rice cut off, United States exports in 1941-42 were large enough to reduce the carry-over at the beginning of the 1942-43 year to only about 0.5 million bushels. With the crop indicated at 72.3 million bushels and imports negligible, supplies in 1942-43 will total about 72.8 million bushels.

Requirements in 1942-43 are tentatively placed at a total of 66.3 million bushels, consisting of civilian food of 26.5, military 1.9, feed 0.9, seed 3.3, regular exports 14.1, lend-lease 10.0, and shipments to insular territories of 10.5 million bushels. Requirements of this size would leave a carry-over at the beginning of the 1943-44 year of 6.5 million bushels. However, the requirements figures include increases, compared with last year of 8.7 million bushels for exports and lend-lease, and 1.9 million bushels for shipments to possessions, all of which depend upon the availability of shipping space. If space is not amply provided and exports and shipments are no larger than in 1941-42, the carry-over would be 17.1 million bushels instead of 6.5 million bushels. This is a problem with respect to rice which must be solved.

The total disappearance in 1943-44 is estimated at 68.3 million bushels, 2.0 above 1942-43. Again the high level of exports, shipments, and lend-lease will depend upon the shipping space available. If space is not amply provided and these are no larger than in 1941-42, the carry-over would be increased proportionately.

In the period 1932-41, when large carry-over existed in most years, the carry-over of rice averaged $5\frac{1}{2}$ million bushels. Considering the probability that shipping space may not be ample for the movement of the quantities set up as feasible, a carry-over of 5 million bushels is considered fully adequate. If the carry-over at the beginning of the 1943-44 year is 6.5 million bushels and total requirements are 68.3 million bushels, a crop of 66.8 million bushels would be needed to leave a carry-over at the end of the year of 5 million bushels. Assuming the 5-year (1938-42) average yield per acre of 48.4 bushels, this production would require 1,380,000 acres. This is 10 percent above the 1941 acreage of 1,257 million acres, 5 percent above the January goal in 1942 of 1,320,000 acres, but 7 percent below the 1942 actual seedings of 1,481,000 acres. The recommended goal is 6-1/2 percent below the feasible acreage as estimated in August.

For the 1943 agricultural conservation program it is planned that no deductions from payments be made for overplanting allotments (the same as last year), but deductions be made if less than 90 percent of the allotment is planted, unless war crops are substituted. In the case of rice, little substitution of war crops is possible. In order to obtain the acreage goal it is recommended that if possible the national allotment be set at the goal level.

While the provision of no deduction for overplanting would ordinarily encourage overseeding, it is not expected that this provision in 1943 would do so because of the shortage of labor and machinery. About half of the total distribution estimated for the season 1942-43 must move out of the country in ships. Shipping is now under strict Government control, both as to what is to move and when and in what quantities. Buying for Hawaii, Puerto Rico (and perhaps soon for Cuban accounts), has been taken over by Government purchasing agencies. Milling facilities are adequate to handle the crop in 1942 only if they are able to run with a minimum of lost time. If the Government purchases are not made in such a manner as to permit the efficient use of milling capacity, the processing of rough rice would be retarded and the carry-over at the end of the year increased.

If the 1942-43 rice supplies are moved into domestic and foreign channels in the quantities set forth above and the movement is orderly, storage space will not be a problem of great difficulty.

WHEAT, RYE, RICE

Supplies, Production, Disappearance, and Stocks 1942

Commodity	Unit	Year begin- ning	Stocks	Pro- duction	Imports	Supplies	Exports		Consumption			Carry-- Over
							Commer- cial	Lend- Lease	Civilian	Military		
1	2	3	4	5	6	7	8	9	10	11	12	
Wheat	Mil. bu.	July	633	982	2	1,617	Exp. 16 Poss. 3 19	35	Food 486 Feed 150 Seed 64 Alcohol 30 730	32	801	
Rye	Mil. bu.	July	1/31	60	15	106	0	3	Food 9 Feed 33 Seed 8 Alcohol 2 52			
Rice	Mil. bu.	2/ Aug.	0.5	72.3	0	72.8	Exp. 14.5 Poss. 10.5 25.0	8.6	Food 26.6 Feed 0.9 Seed 3.3 30.8	1.9	6.5	1/ 51
1/ Farm stocks June 1 and commercial stocks July 1.												
2/ Includes California on Oct. 1 year.												

1/ Farm stocks June 1 and commercial stocks July 1.
2/ Includes California on Oct. 1 year.

WHEAT, RYE, RICE

Supplies, Production, Disappearance 1936-40, 1941

Confidential
Work Sheet
Goals for 1943

Commodity	Unit	Year beginning	1936-40										1941		
			Domestic					Domestic					Domestic		
			Stocks	Production	Import	Export	Disappearance	Carry-Over	Stocks	Production	Import	Export	Disappearance	Carry-Over	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Wheat	Mil. bu.	July	182	800	8	Exp. 59 Poss. $\frac{7}{62}$	693	235	385	946	3	Exp. 27 Poss. $\frac{7}{30}$	671	633	
Rye	Mil. bu.	July	<u>1/16</u>	42	1	2	41	<u>1/16</u>	<u>1/22</u>	45	9	0	45	<u>1/31</u>	
Rice	Mil. bu.	<u>2/ Aug.</u>	6.1	52.8	0.5	Exp. 9.3 Poss. $\frac{128}{22.1}$	30.6	6.7	5.9	54.0	0.2	Exp. 15.4 Poss. $\frac{8.6}{24.0}$	35.6	0.5	

1/ Farm stocks June 1 and commercial stocks July 1.
2/ Includes California on October 1 year.

Wheat, Rye, Rice

Acres: Yields and Production 1936-40, 1941, 1942

Commodity	Year Begin- ning	1/ Acres			Unit	Yield				Production			
		1936-40	1941	1942		1936-40	1941	1942	1942	1936-40	1941	1942	1942
		3	4	5		7	8	9		10	11	12	
1	2				6								
		1,000 acres	1,000 acres	1,000 acres		Bushels	Bushels	Bushels		Million bushels	Million bushels	Million bushels	
Wheat	July	71,868	62,404	53,427	Bushels	11.2	15.2	18.4		800	946	982	
Rye	July	3,537	3,498	3,868	Bushels	11.8	12.9	15.4		42	45	60	
Rice	2/ Aug.	1,058	1,257	1,481	Bushels	49.9	43.0	48.8		52.8	54.0	72.3	

1/ Wheat and rice, acres seeded; rye, acres harvested.

2/ Includes California on October 1 year.

Supplies, Production, Disappearance, and Stocks, 1943

Confidential
Work Sheet
Goals for 1943

Commodity	Unit	Year Begin- ning	Estimated Stocks	Estimated Pro- duction	Probable Imports	Supplies	Probable Exports		Consumption		Estimated Carryover	
							Commer- cial	Lend- Lease	Civilian	Military		
1	2	3	4	5	6	7	8	9	10	11	12	
Wheat	Mil.bu.	July	801	1/ 651	2	1,454	Wxp. 16 Poss. 3 19	51	Food 480 Feed 200 Seed 64 Alco. 90 834	50	3/	"Normal" 250 Emergency 50 Stock pile 200 500
							0		4			
Rye	Mil.bu.	July	4/51	5/ 40	15	106						
Rice	Mil.bu.	6/ Aug.	6.5	7/ 66.8	0	73.3	Exp. 41.1 Poss. 10.5 24.6	10.0	Food 26.6 Feed 0.9 Seed 3.3 30.8	2.9	Total	5.0

1/ 52.5 million acres (1942 feasible is 54. 7 and 1943 potential minimum is 52.2 million acres) and yield 12.4 bushels per seeded acre (12.4 bushels is on 52.5 million acres weighted on basis of State acreages x AAA normal yields; on 66.8 million acres, 20 year (1922-41) average yield per seeded acre was 11.9 bushels). Soil moisture conditions for fall crop are very favorable and actual yields may be above normal. If the large yields of 1942 were repeated production would be 966 million bushels or 315 million bushels larger than shown.

2/ Mostly for smokeless powder; any large use for synthetic rubber would be in addition.

3/ Available for synthetic rubber production in 1943-44, and as feed supply reserve; any additional requirements in 1944-45 could be related to an increased acreage for the 1944 crop. The stock pile of 200 million bushels represents 16 million acres, assuming normal yields. If the large yields of 1942 are repeated the carry-over would be increased by about 300 million bushels.

4/ Farm stocks June 1 and commercial stocks July 1.

5/ 3.6 million acres (1943 feasible is 3.787,000 acres) and yield of 11.1 bushels per seeded acre (20-year average yield weighted by States.

6/ Includes California on October 1 year.

7/ 1,380,000 acres, assuming 5-year (1938-42) average yield of 48.4 bushels.

8/ In 1932-41, when large carry-overs existed in most years, the carry-over averaged 5-1 1/2 bushels.

Supplies and Utilization of Products, By Quarters - 1942 and 1943

Commodity	Unit	1942				Total	1943				Total
		Jan. Mar.	Apr. June	July Sept.	Oct. Dec.		Jan. Mar.	Apr. June	July Sept.	Oct. Dec.	
Wheat: Supply Use <u>2/</u>	Mil.bu.	988 186	802 169	<u>1/</u> 1,615 201	1,414 216	4,819 772	1,198 193	1,005 204	<u>1/</u> 1,452 237	1,215 251	4,870 885
		802	<u>3/</u> 633	1,414	1,198	4,047	1,005	<u>3/</u> 801	1,215	964	3,985
Rye: Supply Use <u>2/</u> Stocks <u>4/</u>	Mil.bu	45 6	39 8	<u>1/</u> 91 11	80 13	255 38	67 7	60 9	<u>1/</u> 91 13	78 13	296 42
		39	31	80	67	217	60	51	78	65	254

- 1/ Includes new crop.
2/ Domestic use, exports and shipments, adjusted for imports.
3/ Old crop wheat only; actual stocks on July 1, may be 20 million bushels larger if season is early.
4/ Farm stocks June 1 and commercial stocks July 1.

